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Accounting Reviews

Mode of Conducting an Audit
WALTER A. STAUB

A Simplified Solution of Circuit Ratio Problems
DR SCOTT

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The Accounting Review

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No. 2

MODE OF CONDUCTING AN AUDIT*

WALTER A. STAUB

BEFORE proceeding to the consideration of the mode of conducting an audit, it may be well to inquire as to the purpose and object of making an audit. The reasons clients may have for wishing audits made are many and diverse.

Periodical examinations of the accounts of commercial and financial institutions, special examinations for prospective investors, investigations on behalf of creditors and trustees in bankruptcy, examinations to ascertain the cause of decreasing profits, exhaustive audits preparatory to installing improved systems of financial and cost accounts, and investigations of the accounts of public officials at the behest of dissatisfied citizens are but a few of the many purposes which clients have in mind when desiring to have the accounts of an undertaking audited.

The object of the auditor should be, in the main, threefold: (1) detection of fraud, (2) discovery of errors of principle, (3) verification of the mechanical accuracy of accounts. As has been pointed out by other writers, the attempted concealment of fraud must be accomplished by commission of either an error of principle or one in the mechanical work of the accounts; owing, however, to its importance,

and often its predominating importance, the detection of fraud is conceded a separate place among the objects of an audit. From first to last it is the auditor's duty to be on the lookout for fraud. Nine times out of ten the client who determines upon an audit suspects no one in his employ in the slightest of dishonesty, and yet experience teaches that in nine cases out of ten it is where they are least expected that fraud and dishonesty are discovered. This should not be taken to mean that all the employees in a client's office are to be suspected of being rogues masquerading as honest men—on the contrary every man is held to be innocent until proven to be otherwise—but it does mean that the auditor must be vigilant and not forget that occasionally, or we may even say frequently, "appearances are deceitful." Errors of principle are as often found to be errors of omission as of commission, and it is here that an initial audit most often bears its fruit. As regards verifying the mechanical accuracy of accounts, it would be preposterous of course to suppose that an auditor in the limited time at his disposal could be expected to verify every footing, every posting, and all the other routine details of a set of accounts. The verification incident to and necessitated by the attainment of the first two objects is usually sufficient reasonably to satisfy him of the correctness of the accounts from this standpoint.

Having very briefly considered the pur-

* This article, which won the author a prize at the first international Congress of Accountants in St. Louis in 1904, is reprinted from the official record of the Congress because of its historical interest as the earliest authoritative description of the typical American audit program. The same author's new book, *Auditing Developments During the Present Century*, is reviewed elsewhere in this issue.

pose and object of making an audit, we may now profitably proceed to the question of the mode of conducting it. In the treatment of such a general subject as this, it is necessary to deal largely in generalities, leaving the particulars and their application to be determined by individual practice and experience. It is not the intention of the writer to pronounce any dictums or to lay down any hard and fast rules, but rather to touch upon the general lines of procedure which suggest themselves as being essential to a satisfactory investigation of a set of accounts.

When an audit is being made for the first time it will be of great advantage to the auditor to go thoroughly over the system in force, the methods employed to gather the information necessary to the proper administration of the accounting department, the manner in which it is treated after obtained, whether intelligently or otherwise; he should observe the safeguards, if any, against error, intentional or unintentional; and further note whether in the case of manufacturing and mercantile enterprises any system of stock accounts is kept (in the case of the former whether there is a cost system) and whether they fit into the scheme of the general accounts or are in any way of assistance. It is also desirable that he familiarize himself, at least in a general way, with the business of his client, ascertaining in the case of a commercial undertaking, for instance, the articles manufactured or handled, the average rate of profit which is expected to be earned, and the numerous other matters that will suggest themselves.

Succeeding this preliminary survey, the mode of procedure should be mapped out in considerable detail. It will, of course, not be possible to determine in advance all the work that should be done, as the results and observations made during the progress of the audit will call attention to much of

the detail which it may be desirable to go into, but there is no question that a well laid out plan will greatly facilitate and simplify the work in hand.

Ordinarily, the work of the audit will naturally run in two channels, viz., the verification of a balance sheet on a date specified and the examination of the profit and loss or equivalent account for a period or a number of periods ending with the date of the balance sheet.

A balance sheet is a statement of assets and liabilities as of a given date, hence an audit of it will embrace, (a) the verification of the existence of the assets, ascertaining whether any have been omitted, and, as far as it lies within the province of the auditor, judging their values, or at least determining the bona fides and the methods of derivation of those items whose statements of value are open to question; (b) the verification of the existence and amounts of the liabilities and ascertaining most particularly that there have been no omissions, either of contingent, accrued, or direct liabilities.

Of the assets the cash naturally suggests itself as the item which should be verified at the earliest possible moment. Bank balances should be proved by reconciliation of the balance per check book with the bank pass book which should be settled at the time of the audit, or, if there is any doubt as to the authenticity of the pass book, by procuring a certificate from the bank. Cash and checks on hand should be counted, the latter being carefully scrutinized as to date and also as to entry in cash book; if this precaution be omitted it is possible that a shortage may be concealed by submitting as part of the cash balance certain checks which have not yet been entered. Memoranda, I.O.U.'s, etc., should be noted, attention being given to the question of the authority of the cashier to make advances or other payments on memoranda. Where cash is on hand in

several different departments, as for instance in a bank, it is important that, as far as practicable, the counting of the cash proceed simultaneously in all the departments; otherwise cash already counted in one department might be very easily transferred to another department, and, unknown to the auditor, be included as part of the balance in the latter, and thus be used to conceal a shortage.

Accounts receivable are, in many instances, very trying to the auditor and call for special attention as to both their genuineness and value. Where it is practicable for the auditor to send out to the debtors, or examine before they are sent out, statements of their accounts, this is the most satisfactory way of verifying them, and especially so if provision is made for acknowledgment (addressed to or marked for the auditor) of their correctness, although there is almost a certainty of some recipients not making any acknowledgment. In some cases, such as that of stockbrokers, this method is absolutely essential, as in no other way can the auditor satisfy himself that the accounts are correct as stated on the books, particularly in the item of collaterals which are carried on the accounts.

In a mercantile business the balances should be earmarked as consisting of certain specific unpaid bills of recent due date. "Slow pay" and overdue accounts and those on which payments are made in round sums with very infrequent settlements should be closely scrutinized, as it is possible that the operation of "washing" is being carried on. That is to say, payments are being received when due, but the earlier collections having been misappropriated such cash credits as appear on the books are made from subsequent collections, or in rare instances, where the use of misappropriated funds is successfully followed up, from restitution. Bad or doubtful accounts should be investigated

before being charged off to make sure that they have not been collected and the moneys misapplied. The old practice of charging off bad accounts to profit and loss without keeping any further record of them is a poor one and is being gradually abandoned. Where bad accounts are charged direct to profit and loss instead of to a suspense account they should be entered in a memorandum book, together with all particulars relating to them, so that they can readily be followed up and any possible future value be realized.

As has already been noted, accounts receivable should be examined for their value as well as genuineness and a suitable reserve provided for such as are bad or doubtful. It is best to err on the safe side and make the reserve too large rather than the reverse. In "lean" years clients are very apt to omit making any reserve for doubtful debts, contending that they will be collected "some time," and the auditor cannot urge too strongly the necessity of making proper provision for them.

Where accounts consist mainly of instalments payable on sales made on the lease agreement plan—the article sold to become the property of the lessee upon payment of the final instalment—a tabulated record of these sales showing total amount of each sale, terms of payment, etc., is much more convenient and lends itself more easily to an intelligent examination than the ordinary form of ledger. To confirm the existence and amount of the accounts the agreements themselves, which are signed by the customer, may be examined and compared with the record. The question of doubtful debts is especially important here, as, with few exceptions, there is sure to be loss on some of the accounts.

Bills discounted and time and call loans, which form the largest item of a bank's assets, should be scheduled together with the collateral pledged with them, both the notes and collateral themselves being

examined or verified by letter as to such items which may be in the hands of correspondents for collection or other cause. The bills discounted should be separated into one-name and two-name paper and indication made of the customer for whom discounted. The value of collateral on loans should be shown as far as practicable; where it consists of securities listed on a stock exchange this is comparatively simple, but in the case of securities which are not listed, such as those of closed corporations, or warehoused goods other than those dealt in on an exchange, it is not so simple a matter and in some instances not practicable for the auditor to attach any value.

The subject of inventories of materials and manufactured products is one of great importance in those businesses of which they form a part. Their verification seems to be somewhat akin to that of payrolls in so far as the most efficient check is to have a number of different people concerned in and held responsible for their make-up. Generally speaking, it is not possible for the auditor to verify the quantities of materials on hand, and he is, to this extent at least, at the mercy of those preparing the inventory. In some very unusual instances the auditor is requested to have one of his assistants present to verify the counting and weighing of the stock on hand, but even in such a case he cannot vouch for the quality of the materials or products. Where the force of clerks is large enough to permit it, the work of taking count of the quantities, pricing, and making the extensions and footings should be assigned to separate employees who should be required to certify separately in writing to the work performed by each of them. The footings should be checked by the auditor's staff and the extensions as well, at least roughly.

The inventories should be analyzed and compared with those of previous periods,

as to both prices and total values, and any marked changes inquired into. Prices of raw materials can be verified by comparison with purchase invoices; where cost accounts are kept the prices of finished goods can be readily verified; if no cost accounts are kept it may be somewhat more difficult, but at all events it should be seen to that there is a margin between the inventory and selling prices of finished goods. The items forming the basis of valuing manufactured products should be scrutinized to see that no expenses which have not been actually incurred are included. For instance, in the case of a publishing house it is usually the rule to pay royalties to authors only on the books actually sold; to include the royalty as part of the cost of unsold books would not be correct unless the royalty had been credited on book account.

Under the heading of "Plant," which may be expanded to include rights of way and tracks of railway companies, together with locomotives, cars, and other equipment, we have a subject which from its very size attracts much attention. It is the consensus among accountants that an auditor cannot be expected to act in the capacity of an appraiser and determine the actual value of the plant of the concern he is auditing. He should, however, examine very carefully all entries in the books relating to this account; the minutes should be consulted regarding all issues of capital stock which may be charged to it for purchase of plant or equipment; charges for extensions and additional machinery, etc., during the period under review should be looked into to make sure that no replacements are being charged to this account because they may happen to run into large amounts; sales of worn-out plant items, such as old boilers, must be verified as having gone to credit of plant account and not to some operating account, unless the original cost or depreciated cost (if depre-

ciation has been provided for) be charged off at the same time. Extensions are, at times, very difficult of verification when the concern does its own construction work, as is largely the case with railway companies, and the materials and labor charges are of exactly the same nature as those for repairs and renewals. In such cases, the character of the extension and the value should be certified to by the engineer or other competent authority.

Depreciation must be considered in relation to any statement of property values. The number of instances in which depreciation is properly provided for forms an exceedingly small percentage of the grand total of business enterprises. The auditor cannot, of course, compel his client to provide for depreciation, but he should certainly call attention to its great importance for both a properly stated balance sheet and a correct report of earnings; and if no provision is made, attention should specifically be called to the fact in the report submitted. The amount or rate of depreciation to be allowed in various undertakings cannot, of course, be gone into in the limited space available nor under such a general heading as that of the subject under discussion. That must be left to the writer who has more space and time at his disposal.

Investments in mortgages, stocks, bonds, etc., should be verified by examination of the securities or by correspondence if pledged as collateral on loans. Their cost can be verified by the vouchers for the expenditures made for their purchase. It is well to note the numbers of registered securities, so that at the time of the succeeding audit, if no change appears in the book accounts of the same, the auditor may satisfy himself that there has been no unauthorized use of them in the interval. It would be found convenient, when the investments are not likely to be disposed of for some time, to place them in envelopes

sealed with the auditor's private seal and their contents marked on the envelopes by him. The unbroken packages do not then have to be examined during every audit.

Prepaid and accrued expenses, such as insurance, taxes, wages, etc., which may rank as either assets or liabilities, are usually not very difficult of verification. The unexpired insurance may be readily proven by scheduling the policies in force with the total premium paid on same and calculating the value that the unexpired portion of the term bears to the whole. When the fiscal year of a business subject to taxation is not coincident with the calendar year, or the period under review is not an even year, prepaid or accrued taxes form an item in the balance sheet; if prepaid their verification is a matter of simple arithmetic; if accrued and the amount of the assessment and the tax levy be known, it is likewise quite simple; if the current year's taxes are not yet known the preceding year's will have to be taken as a basis of calculation, due allowance being made for any expected increase in assessment or levy. Accrued wages may be roughly checked by comparing them with the proportion which the accrued period bears to the whole payroll period, and so on *ad libitum*.

The audit of the liabilities is not of less importance than the audit of the assets. This aspect of the examination demands that great care be taken, as liabilities are more often omitted from the balance sheet than assets. The usual items of liabilities are accounts and bills payable, bonds, mortgages, revenue collected in advance of being earned, such as discount on unmatured notes held by banks, subscriptions paid in advance, etc., and accrued expenses. The proving of accrued expenses has already been spoken of in the preceding paragraph and need not be dealt with again, except to say that the auditor should be certain that all accrued accounts

of whatsoever nature have been included; the verification of revenues collected, but as yet unearned, is in general not very complicated and is generally more a matter of arithmetic than anything else.

As regards accounts payable, the most frequent error in practice is one of omission, and consists of bills for goods actually received and included in the inventory of stock on hand that are not entered in the books during the same fiscal period. Where a good system of stock accounts is in use or a method exists of checking back a record of goods received with the purchase book or the invoices themselves, this is not so liable to occur; but in a concern where neither of these systems obtains, especial vigilance is needed on the part of the auditor to satisfy himself that no bills have been omitted. A good way of verifying the accounts payable is to check back the vendors' statements with the ledger, any bills appearing on the statements but not entered on the books being carefully scrutinized as to their dates and the dates of the receipt of the goods, which latter should be subsequent to the date of the taking of the inventory; otherwise the bills should have been entered.

Unpaid notes per the bills payable book should be totaled and the aggregate compared with the ledger account. In the case of collaterals being pledged on the loans, the holders should be communicated with for confirmation of the loans and the collateral. This is especially important in the case of stock brokers and similar houses where the balancing of the stocks is an important feature of the audit.

In the matter of bonds or mortgages the minutes of the concern, if it be a corporation, should be consulted for authority bearing upon their issue, rate of interest, etc. The bond and mortgage should be read through to see what provisions regarding sinking funds, redemption, etc., may be contained therein, and, further, the auditor should see whether the pro-

visions are carried out. It might also be well to examine the county records for any other encumbrances on real estate appearing among the assets, although it is still an open question how far an auditor's duty extends in this direction.

Contingent liabilities, such as endorsements on bills receivable discounted, should not be overlooked. They sometimes become direct and very live liabilities in short order.

Examination of the books and records pertaining to the issuance of capital stock should, at least, extend to the checking of the stock ledger trial balance and inspection of the stock certificate stubs and preferably also the transfer records. This latter is, however, sometimes of such volume that it is necessary to have it made the subject of a special examination. As with the issuance of bonds, the minutes should be examined for any action relating to issuance, retirement, or exchange of capital stock.

The articles of co-partnership in private firms should be examined for the provisions relating to the investments to be made by the several partners, interest on capital and on withdrawals, division of profits, etc.

The audit of the accounts constituting the profit and loss account is partially covered by the work incident to auditing the items of the balance sheet. It is in this part of an audit that the greatest amount of detail is usually encountered. While this cannot always be said of financial institutions, the verification of those accounts constituting the balance sheet often requiring a more extended examination of detail than the profit and loss section, yet of manufacturing, mercantile, and enterprises of like character this is undoubtedly true.

Limited space permits of only some very general remarks in this connection. The entries in the cash book should be vouched; when the payments are all charged to

personal accounts or for such of them as are charged when this is only partially the case, paid checks may be accepted as sufficient vouchers. Invoices for purchases should be examined and used to vouch the credits to the personal accounts. These latter usually come through a purchase book or voucher register, or where the system is antiquated are found in the journal. Checks which are drawn to "Bearer," "Cash," or to order of a bank in such form that the funds could be obtained by the bearer either in cash or due bill, should, of course, not be accepted as final vouchers. A check to the order of payroll is of no value as a voucher for wage payments, except in so far as it might imply that the drawer held himself responsible for the correctness of it; such a conclusion would, however, be rather far-fetched, as the person signing a check is not unusually one upon whom the examination of the payroll would devolve.

In the case of very large concerns it is not practicable for the auditor to examine all the vouchers. Even in such cases, however, it is well to vouch all payments which are charged direct to operation accounts. The best plan is to have all payments charged to personal accounts or a controlling account, such as "Vouchers Payable," to have all vouchers entered in a voucher register to the credit of personal accounts or the controlling account, and to have the cash book and the voucher register kept by separate persons. By this method the voucher for each payment, except such few as it may be desired to charge direct in the cash book, and which can be readily examined by the auditor, is submitted to the scrutiny of a second person, who has no connection with the cash or bank account and who, except in the event of collusion with the cashier, would have no interest in putting through any fictitious vouchers.

In connection with the subject of vouching payments, that of payrolls may be

spoken of. It is generally conceded that, as regards payrolls, the only safety is in numbers, that is, in a good system designed to use a number of different people in preparing the figures. An auditor may verify the footings and in some cases be able to check back the payroll to the original time reports from which it is made up, but to accept any responsibility further than this is foolish in the extreme. Even in the instances where it might be possible to verify the payroll by other documents, the time required to do it would usually entail much greater expense than clients would care to pay.

The person making up the payroll time reports should not be the same one who affixes the rate and makes the extensions, nor should either of these, where it is possible to avoid it, be concerned in the filling of the envelopes or the actual paying off. In some parts of the country, such as in the South, where thriftless negro labor is employed, the question of unclaimed wages becomes quite important. A good plan to take care of these items is for them to be turned over to the treasurer, or some other authorized person, immediately upon completion of the paying off, to be entered by him in a book ruled to permit of the workman signing for his envelope when he calls for it subsequently. After a sufficient lapse of time those still uncalled for should be returned to the general cash, being credited to an "Unclaimed Wages" account. From the book before mentioned, the auditor can easily see that no unclaimed wages are lost to the company or proprietor.

In practice the satisfactory auditing of the income will be found more difficult than that of the expenses. Here, too, a good system is the best assurance of the integrity of the accounts. The recording of the sales should not be committed to the charge of the same person who handles the cash collected. This will go far to insure the correctness of the sales record and obviate any intentional omissions. Where

possible the auditor should verify the sales independently for at least a portion of the period under review. The circumstances of each particular situation must, of course, govern. In some cases the shipping book, which is kept in the factory or store, can be compared with the sales book. If a stock account of the production is kept or can be constructed, as for instance at coal or ore mines, the sales can usually be verified, as to quantities at least, quite satisfactorily.

In this connection the matter of "internal check," which is dwelt upon at length in most works on auditing, may be mentioned. Briefly stated, it consists largely in so disposing the office staff that there will in reality be an internal audit continually going on. In some cases this is arranged by changing the duties of the various clerks from time to time; e.g., in a bank where there is more than one individual bookkeeper, it is well to change the bookkeepers from one ledger to another; where there is only one it is not always practicable to vary his duties, but the trial balances can occasionally be taken off by some one other than the bookkeeper.

In other instances this is accomplished by having the work so divided that the work of one person is incomplete by itself and must dovetail into that of another before being complete, the theory being that only by collusion between two or more persons would it be possible to conceal dishonesty. In still other instances the duties of one of the office force may be those of an auditor, that is, he would verify much of the detail which would not be practicable for the professional auditor to go into. A case in point is the auditing of the income of railway companies. Here there is need to have auditors constantly checking the income from freight and passenger traffic. The safeguards to be placed about payrolls and sales, which come

under this head, have already been touched upon.

Income from securities presents no especial difficulty, as that collectible on bonds and mortgages can be determined from the securities themselves, while the dividends declared on stocks can usually be quite easily ascertained.

Miscellaneous income must be dealt with as the occasion demands; there are hardly any two businesses in which it can be verified in exactly the same way.

Regarding the footings and postings to be verified, this will, of course, vary with circumstances. As a general rule, the footings of all the books of original entry and of the nominal ledger accounts should be verified. All postings to the impersonal accounts and, at least, the credit postings (particularly the cash) to all other accounts should be checked. It goes without saying that the trial balance and its footings, as well of subsidiary ledgers as of the general ledger, should be verified.

A few words concerning the report upon the audit may not be out of place. The report should be clear and concise. Qualifications pertaining to the work or to any financial statements which may form a part of the report should be definitely expressed without any ambiguity. It may be noted that qualifications are not very desirable from a client's point of view and should only be made where there is good ground for so doing.

In conclusion, there will in the course of many audits be assets or liabilities, or classes of income and expenses, to be verified which have not even been mentioned in this dissertation. The aim of the writer has been to illustrate the mode of conducting an audit by touching upon the methods of auditing the items which commonly appear in the balance sheets and profit and loss accounts submitted to the auditor for examination.

A SIMPLIFIED SOLUTION OF CIRCUIT RATIO PROBLEMS

DR SCOTT

THE DIFFICULTY presented by a circuit of intercompany ownership relations is familiar to those who are conversant with the preparation of consolidated statements. If Co. A owns 4/5 of the stock of Co. B and B owns 3/4 of the stock of Co. C while C in turn owns 1/10 of A's stock, we have a situation which leads us into an infinite series when we apply the usual process of preparing a consolidated balance sheet. The equity of each company is dependent upon the equities of all of the other companies within the circuit.

The standard method for the solution of problems of this type is the use of simultaneous equations.¹

In order to illustrate the method of simultaneous equations we may assume balance sheets for the above group of companies as follows:

Balance Sheet of Co. A

Stock of B (80%)	\$250,000	Capital Stock	\$400,000
Misc. Assets	300,000	Surplus	50,000
	<u>\$550,000</u>	Misc. Liabilities	100,000
			<u>\$550,000</u>

Balance Sheet of Co. B

Stock of C (75%)	\$100,000	Capital Stock	\$250,000
Misc. Assets	300,000	Surplus	60,000
	<u>\$400,000</u>	Misc. Liabilities	90,000
			<u>\$400,000</u>

Balance Sheet of Co. C

Stock of A (10%)	\$ 44,000	Capital Stock	\$100,000
Misc. Assets	200,000	Surplus	45,000
	<u>\$244,000</u>	Misc. Liabilities	99,000
			<u>\$244,000</u>

It is assumed that B acquired 3/4 of the stock of C for \$100,000 when C's surplus was \$20,000. Later A acquired 4/5 of B's stock for \$250,000 when B's surplus was \$40,000 and C's \$30,000. And still later C acquired 1/10 of A's stock at the price shown in C's balance sheet.

The equity which B acquired in C had a book value of \$90,000. It consisted of \$75,000 in par value of stock taken over and \$15,000, or three-fourths, of C's surplus. The additional \$10,000 paid above the book value is considered to have been paid for consolidated goodwill.

The book value of the equity in B acquired by A was \$238,000. This equity consisted of \$200,000 in B's stock, \$32,000, or four-fifths, of B's surplus, and a \$6,000 equity in the increase of C's surplus after B acquired control of C. Since A's payment for the stock of B taken over was \$250,000, it included \$12,000 for additional consolidated goodwill.

Each company has title to its own assets but of course those assets are subject to the claims of creditors so that the equity of stockholders in them is their net value. The net assets of the different companies may be expressed as follows:

Co. C:

Misc. Tangible Assets \$200,000 less Misc. Liabilities \$99,000 equals Net Assets \$101,000.

Co. B:

Misc. Tangible Assets \$300,000 plus Goodwill \$10,000 less Misc. Liabilities \$90,000 equals Net Assets \$220,000.

Co. A:

Misc. Tangible Assets \$300,000 plus Good-

lation of the percentage equity of each company in a circuit in the net assets of each of the other companies. However, Mr. Carman's method is more cumbersome than the method of simultaneous equations and for that reason it has only academic significance.

¹ In several issues of *The American Accountant* beginning in April, 1932, Lewis A. Carman presented an interesting alternative method which involves the calcu-

will \$12,000 less Misc. Liabilities \$100,000 equals Net Assets \$212,000.

The gross equity of each company may be expressed in terms of its own net assets plus its equity in another company. Thus we arrive at the following simultaneous equations.

$$\begin{aligned} A &= \$212,000 + 4/5 B. \\ B &= 220,000 + 3/4 C. \\ C &= 101,000 + 1/10 A. \end{aligned}$$

Solving these equations we determine the majority and minority equities. The minority equity is $\frac{1}{4} C + 1/5 B$ or a total of \$103,489.36 and the majority is $9/10 A$ or \$429,510.64. The consolidated balance sheet is therefore as follows:

Consolidated Balance Sheet of Co. A and Its Subsidiaries

Misc. Tangible Assets	\$800,000	Majority Equity:	
Consolidated Goodwill	22,000	Capital Stock	\$360,000.00
		Surplus	69,510.64
		Total	\$429,510.64
		Minority Equity:	
		Capital Stock	\$75,000.00
		Surplus	28,489.36
		Total	103,489.36
		Misc. Liabilities	289,000.00
	<u>\$822,000</u>		<u>\$822,000.00</u>

Of course all such problems could be solved by the usual processes of consolidation. The profits earned after consolidation could be carried round and round the circuit until the remaining portion did not exceed one cent. Usually the fractional part of the stock of the major holding company in the group which is owned by a subsidiary company is small. As a result the amount carried forward to succeeding rounds of the circuit is rapidly reduced. But in spite of this fact the application of such a method would be very cumbersome indeed. However, it suggests a simple process which obviates the necessity of using simultaneous equations.

Each time we carry profits through such

a circuit, allocations will be made to minority interests and to the majority interest. The proportions of profits so allocated will always be the same. We can therefore take a convenient sum through the circuit and determine what fraction of the amount so allocated goes to the majority interest and the minority interests. These percentages can then be applied directly to the profits which, under the foregoing long process, would be carried forward to a second trip around the circuit.

Applying this short process to the above problem, let us take an arbitrary assignment of \$4,000 of profits to Co. C. These would divide as follows: \$1,000 to the minority in C and \$3,000 to B. In B the

\$3,000 would divide as follows: \$600 to the minority in B and \$2,400 to A. In A the \$2,400 would divide as follows: \$2,160 to the majority stockholders and \$240 back to C. In this process \$3,760 is given final allocation: \$1,600 to minority interests and \$2,160 to the majority interest. The fractions which they represent respectively of \$3,760 are approximately 42.55% and 57.45%.

In order to determine the sum to which these percentages are to be applied we must first find out the equity of Co. A in the surpluses of all the companies. This equity is \$50,000 in A; \$16,000 in B ($4/5 \times \$20,000$, the increase in B's surplus since A acquired control of B); and \$9,000

in C ($3/4 \times 4/5 \times \$15,000$, the increase in C's surplus since A acquired its indirect control of C). This makes a total of \$75,000. Of this sum, 9/10, or \$67,500, attaches to the stock owned by the majority stockholders and the remaining \$7,500 attaches to the stock of A owned by C. But C already has taken up \$4,000 of this surplus equity in its holding the stock of A on its books at a price \$4,000 above par value. Of the \$3,500 left, 42.55%, or \$1,489.25, will be allocated to minority interests and 57.45%, or \$2,010.75, will be allocated to the majority interest.

The total minority surplus will be made up as follows:

1. Minority equity in C's surplus, $\frac{1}{4} \times \$45,000$	= \$11,250.00
2. Minority equity in B's surplus, $1/5 \times \$60,000$	= 12,000.00
3. B minority's equity in surplus increase in C since B acquired control of C, $1/5 \times 3/4 \times \$25,000$	= 3,750.00
4. Minority equity in the unallocated surplus attaching to stock of A owned by C	= 1,489.25
Total	<u>\$28,489.25</u>

The majority surplus will be \$69,510.75, including the \$67,500 directly allocated to the majority stock and the \$2,010.75 majority equity in the unallocated surplus attaching to the stock of A owned by C.

The few cents difference in results obtained by this method from those obtained by the use of simultaneous equations is due entirely to the failure to carry calculations to more decimal places. With more precision in the calculations, results by the two methods would agree exactly. It may be pointed out also that the percentages for any group of companies corresponding to the 42.55% and 57.45% in this problem could be used without change in the preparation of subsequent balance sheets. They would need to be recalculated only when there was a change of stockholdings within the group.

The procedure here suggested is not only shorter and simpler than the method of simultaneous equations. It also applies more aptly to complex situations involving both common and preferred stock in subsidiary companies. Take for illustration the situation presented in the following balance sheets:

Balance Sheet of Co. X

Stock of Z (25%)	\$ 80,000	Capital Stock—Common	\$100,000
		Capital Stock—Preferred	60,000
		Surplus	1,200
Misc. Assets	152,000	Liabilities	70,800
	<u>\$232,000</u>		<u>\$232,000</u>

Balance Sheet of Co. Y

Stock of X—(80%) Common	\$ 72,000	Capital Stock	\$200,000
Stock of X—(75%) Preferred	45,000	Surplus	50,000
Misc. Assets	220,000	Liabilities	87,000
	<u>\$337,000</u>		<u>\$337,000</u>

Balance Sheet of Co. Z

Stock of Y (90%)	\$189,000	Capital Stock	\$300,000
		Surplus	40,000
Misc. Assets	261,000	Liabilities	110,000
	<u>\$450,000</u>		<u>\$450,000</u>

Co. Y owns $\frac{3}{4}$ of X's preferred stock and $\frac{4}{5}$ of X's common. These were taken over at the prices shown in Y's balance sheet, which were book values. X's preferred stock is 6% non-cumulative; preferred as to assets and participating up to but not beyond 8%. Z owns $\frac{9}{10}$ of Y's stock taken over at the price shown in Z's balance sheet, which was book value. This purchase was antecedent to Y's acquisition of X's stocks. Co. X owns $\frac{1}{4}$ of Z's stock acquired at the price shown in X's balance sheet. No current dividends have been paid on either class of X's stock.

The solution of this problem will be simpler if we first calculate Z's surplus equity without taking any account of X's surplus of \$1,200. It will be made up as follows:

1. Surplus of Z	= \$40,000
2. Z's equity in the increase of Y's surplus, $\frac{9}{10} \times \$40,000$	= 36,000
3. X's interest in Y's equity in X arising through the elimination of the deficit at consolidation $\frac{9}{10} \times \frac{4}{5} \times \$10,000$	= 7,200
Total	<u>\$83,200</u>

One-fourth of this total of \$83,200, or \$20,800, attaches to the stock of Z owned by X. Subtracting the \$5,000 already taken up on X's books in holding the stock of Z at \$80,000, we have \$15,800 which is the unallocated surplus attaching to the stock of Z owned by X. To this we must add the \$1,200 surplus on X's books making a total of \$17,000. Of this sum, \$4,800 is an equity of the preferred stockholders. When the \$4,800 is distributed it divides as follows: \$1,200 to minority preferred stockholders; \$360 to the minority in Y; \$2,430 to majority stockholders, and \$810 back to X. The surplus attaching to the common stock of X will therefore be \$17,000 - \$4,800 + \$810 or \$13,010.

To simplify the division of this surplus between majority and minority interests we take as a trial number \$5,000. It divides as follows: \$1,000 to the minority in X and \$4,000 to Y; \$400 to the minority in Y and \$3,600 to Co. Z; \$2,700 to majority stockholders and \$900 back to Co. X. Thus the distribution to minority interests is \$1,400 and that to the majority is \$2,700. The ratios of these are approximately 34.15% and 65.85%. Allocating the \$13,010 according to these percentages, the amount going to the minority is \$4,442.91 and that to the majority is \$8,567.09.

The minority surplus will be made up as follows: minority preferred stock \$1,200 ($\frac{1}{4} \times \$4,800$); Y minority interest in Y's surplus \$5,000 ($\frac{1}{10} \times \$50,000$); Y minority in X's preferred stock \$360 ($\frac{3}{4} \times \frac{1}{10} \times \$4,800$); Y minority interest in the surplus arising from the elimination of X's deficit \$800 ($\frac{4}{5} \times \frac{1}{10} \times \$10,000$); allocated to the minority by the process presented in this discussion \$4,442.91. The total minority surplus is \$11,802.91.

The majority surplus will be made up as follows: allocated to the majority in the initial calculation of Z's surplus \$62,400 ($\frac{3}{4} \times \$83,200$); direct majority equity in preferred stock surplus \$2,430 ($\frac{3}{4} \times \frac{9}{10} \times \frac{3}{4} \times \$4,800$); allocated to the majority by the process presented in this discussion \$8,567.09. The total majority surplus is \$73,397.09.

For the consolidated balance sheet of Co. Z and its subsidiaries see page 103.

When, in the foregoing problem, we reach the point of finding that the surplus attaching to the common stock of X is \$13,010, we could apply the method of simultaneous equations and set up the following equations:

$$\begin{aligned} X &= \$13,010 + \frac{1}{4} Z \\ Y &= \frac{4}{5} X \\ Z &= \frac{9}{10} Y \end{aligned}$$

Assets		Liabilities	
Miscellaneous Assets	\$633,000.00	Majority Equity:	
		Capital Stock	\$225,000.00
		Surplus	73,397.09
		Total	\$298,397.09
		Minority Equity:	
		Cap. Stk. Com.	\$ 40,000.00
		Cap. Stk. Pfd.	15,000.00
		Surplus	11,802.91
		Total	66,802.91
		Liabilities	278,800.00
	<u>\$633,000.00</u>		<u>\$633,000.00</u>

Solving these equations we get the following values:

$$X = \$15,856.85$$

$$Y = 12,692.68$$

$$Z = 11,423.41$$

Hence $1/5$ X plus $1/10$ Y equals \$4,442.44 which is the minority portion of the surplus in question and $3/4$ Z equals

\$8,567.56 which is the majority portion. Here again the differences in cents are due to our approximations in not carrying calculations to more decimal places.

However, the use of simultaneous equations is a waste of time and energy when there is available a shorter and quicker process which requires no more than the use of simple arithmetic.

EXCESS-PROFITS TAXATION AND PROFIT LIMITATION

E. GORDON KEITH

I

THE NEED for some form of profit limitation in wartime is generally recognized. The impact of war spending on an economy geared to peacetime production is such that excessive profits must inevitably arise at many points. The conversion of a peacetime economy into a wartime economy not only creates new scarcities, but it also requires businessmen to produce goods which they have never produced before. Under these circumstances costs cannot be accurately estimated and profits may prove to be ex-

cessive. Furthermore, higher prices may be needed to encourage production by marginal producers, thereby giving windfalls with respect to output previously produced. On the other hand, it is the duty of the government to see that a few do not profit from the sacrifices of the many. It must therefore provide some means whereby excessive profits can be recaptured before they pass into the stream of spendable income. War profits must not be allowed to create war profiteers.

The limitation of war profits must not, however, be permitted to impede the war

effort. Profits have a positive contribution to make even in a wartime economy. In most sectors of the economy, the normal peacetime role played by profits in determining what and how much will be produced has been taken over by the government. But the profit motive still has an important part to play within this framework by providing incentives to control waste and inefficiency and to keep production costs from rising. The profit motive is not, of course, the only factor contributing to these ends, but its importance should not be underestimated.

After all, profit limitation is not an end in itself. It is simply a means for promoting an equitable distribution of the sacrifices which the nation must bear in time of war. The end sought is, of course, the maximization of output. An equitable distribution of war burdens will contribute to this end to the extent that it increases the willingness of many groups in the economy to work longer and harder than usual. At the same time, profit limitation may tend to weaken the incentives of other groups. The purpose of profit limitation should be to maximize the total productive efforts of all groups in the economy.

Under any method of profit limitation, standards for the measurement of excessive profits must be set up. This is no easy task, since the reasonableness of a profit should ideally be judged with reference to the particular circumstances which surrounded the establishment and conditioned the growth of each individual enterprise. Under any general standard some profits will inevitably be deemed excessive which would not be so judged under an ideal standard, and some profits will be deemed reasonable which, by this ideal test, would be held excessive. It is the purpose of this essay to examine the manner in which profit limitation has been imposed under the excess-profits tax.

II

Even before the growing threat of war abroad had begun to cause concern in this country, a considerable amount of attention was given to the need for profit limitation in the event of our involvement. In the thirties, numerous war-finance bills and resolutions were introduced in both Houses of Congress. Discussion centered mainly around the recommendations of the War Policies Commission¹ made in 1932, and those of the Nye Committee² made in 1935; the former body recommended a 95-per cent tax on profits in excess of the average income earned during the three years preceding the war, whereas the Nye Committee proposed a 100-per cent tax on profits in excess of 6 per cent of invested capital.

The first step in the taxation of profits derived from the production of military supplies was taken in 1934 in connection with the passage of the Vinson-Trammell Act of that year,³ which authorized the construction of a number of naval vessels and Navy aircraft. Section 3 of this Act provided for the recapture of all profits in excess of 10 per cent of the price paid with respect to both prime contracts and sub-contracts exceeding \$10,000. Subsequent amendments, which changed the rates of allowable profits and brought Army aircraft under these provisions, were made in the period from 1936 to 1940.

With the sharp expansion in the defense program which followed the invasion by Germany of France and the Low Countries in 1940, profit-limiting legislation of the type enacted in the Vinson-Trammell Act was no longer broad enough in scope to meet the situation. The rising tide of government expenditures flowing directly

¹ House Document No. 264, 72nd Congress, 1st Session.

² Senate Report No. 934, Part 2, 74th Congress, 1st Session.

³ Act of March 27, 1934, 48 Stat., 1935.

or indirectly into hundreds of business enterprises made it clearly impossible to separate out war profits. Furthermore, any attempt to impose special profit limitations on the holders of war contracts and sub-contracts would have seriously interfered with the government's program to secure the maximum cooperation of private enterprise in the defense program. Hence, when the President, in his message to Congress on July 1, 1940, recommended the enactment of a steeply graduated excess-profits tax on all individuals and corporations, Congress lost no time in taking action on tax legislation which had been under discussion for more than a decade.

The Second Revenue Act of 1940 suspended the profit-limiting provisions of the Vinson-Trammell Act and substituted an excess-profits tax on corporations. On the ground, first, that individual and partnership incomes were subject to heavy surtaxes on both distributed and undistributed net income, and second, that the determination of invested capital for individuals and partnerships was difficult, if not impossible, Congress limited the excess-profits tax to corporations.

III

In drafting this excess-profits tax, Congress had under consideration two standards by which "excessive" earnings could be measured: the invested-capital standard and the base-period earnings standard. The former measures the excessiveness of profits by reference to the rate of return on invested capital. This standard was applied in the determination of *excess profits* under the Revenue Act of 1918, and was recommended by the Nye Committee in 1935. The base-period standard measures excessive earnings by reference to the taxpayers' actual earnings in some previous period. This standard was used in determining *war profits* under the 1918 Act, and

was recommended by the War Policies Commission in 1932.

Although an invested-capital standard may be so selected that it also reflects the base-period experience of the taxpayer, in practice there has usually been a fundamental difference between these two methods of measuring excess profits. Under the invested-capital standard, the taxpayer is subject to a general provision which ordinarily takes no account of the company's own particular experience. On the other hand, under the base-period standard, each taxpayer is treated as a special case and its excess-profits taxes, if any, are established with reference to its own business history.

Since each of these two standards gives a very different meaning to the term "excess profits," their difference is particularly significant from the point of view of profit limitation. Under the invested-capital standard, a profit is not excessive so long as it falls short of a stated return on invested capital. Thus, a corporation solely engaged in the performance of war contracts from which it earns the stated rate of return on its invested capital would not be deemed to have earned excess profits, even though its normal peacetime earnings amounted to substantially less than the stated return on invested capital. On the other hand, under the base-period standard, a profit is not deemed to be excessive so long as it does not exceed the average profit (or some percentage of such profit) earned during a selected number of pre-war years. Thus, a firm solely engaged in the performance of war contracts would pay no excess-profits taxes so long as its current earnings, although greatly in excess of the stated return on invested capital, did not exceed its earnings during the base-period years.

Since profits which would be deemed reasonable under one of these two standards could be deemed unreasonable under

the other, each had its proponents and opponents. This controversy was finally resolved by granting taxpayers the right to use whichever standard resulted in the lower tax. Thus, Congress may be said to have given the invested-capital and base-period standards equal recognition in the 1940 Act. However, in the light of the development of excess-profits taxation in the Acts of 1941 and 1942, it is now clear that Congress has adopted a base-period earnings standard, but has retained the invested-capital standard as a form of relief for those taxpayers with low base-period earnings.

IV

Under the Second Revenue Act of 1940, taxpayers electing to compute the excess-profits credit by the invested-capital method were allowed a credit of 8 per cent on their entire equity-invested capital and on one-half of their borrowed capital.⁴ Equity-invested capital was defined as the sum of money and property paid in for stock, taxable stock dividends, and accumulated earnings and profits as of the beginning of the taxable year.⁵ In order to protect the invested-capital base of corporations which had sustained operating deficits, it was further provided that such deficits should reduce invested capital only to the extent of the earned surplus of the corporation.

Under the Revenue Act of 1941, the excess-profits credit based on invested capital was reduced from 8 per cent to 7 per cent on all invested capital over 5 million dollars. The Revenue Act of 1942 further reduced this credit to 6 per cent on all capital in excess of 10 million dollars,

but not over 200 million dollars, and to 5 per cent on all capital in excess of 200 million dollars. The 1941 Act also provided that invested capital should be increased by 125 per cent of any new capital contributed to the enterprise during 1941 or subsequent taxable years.

Except for this new-capital provision, the significant changes in the invested-capital credit have tended to reduce the relief afforded by the invested-capital standard. The principal effect of these changes has been to extend the scope of the excess-profits tax in recapturing the war profits of corporations with large amounts of invested capital but with low base-period earnings. Some of the war profits of these large concerns will continue to escape excess-profits taxation. Many railroads and some heavily capitalized firms in other industries will still not pay excess-profits taxes on earnings which are clearly attributable to the War. Although such profits are admittedly war profits, Congress has chosen not to regard them as excessive so long as they represent a low return on invested capital.

Under the present law, however, it is possible for some taxpayers to obtain a higher invested-capital credit than Congress intended them to have. This can be accomplished in two ways, both of which result in nominal increases in invested capital. First, a corporation subject to the excess-profits tax may borrow funds which it does not need, and which it has no intention of using, simply to increase its invested-capital credit by 50 per cent of the added debt outstanding and reduce its excess-profits-tax liability. There are, of course, limits to which this practice could be carried, beyond which it would be easy for the Bureau of Internal Revenue to establish that the additional debt was not incurred for legitimate business reasons, but for the purpose of tax avoidance. There is nothing, however, to prevent cor-

⁴ A specific credit of \$5,000 was allowed to all taxpayers in addition to the excess-profits credit computed either by the invested-capital method or by the income method.

⁵ Invested capital was reduced by the ratio of certain inadmissible assets (such as corporate stocks and tax-exempt securities) to total assets.

porations from holding idle small amounts of borrowed capital.

Second, corporations which have little or no real assets or earning power may be purchased for their invested-capital credit. Such trading in unsuccessful corporations, or corporate shells, is encouraged by the deficit rule under which paid-in invested capital is not reduced by any losses which create a deficit in earnings and profits. As a result of such transactions the purchasing corporations are able to avoid excess-profits taxes.

Some corporations which use the invested-capital credit are probably compelled to pay excess-profits taxes on profits which by any other test would not be deemed excessive. However, since the invested-capital standard is itself now regarded as a form of relief, Congress has not seen fit to grant relief to corporations using it. Even new corporations which were not in business during the base period are given relief through a constructive average base-period net income if their invested capital is abnormally low.

V

Taxpayers who elected to use the excess-profits credit based on income were allowed, under the Second Revenue Act of 1940, a credit equal to 95 per cent of the average base-period net income, plus 8 per cent of any net capital additions, and minus 6 per cent of any net capital reductions. The average base-period net income was to be determined by averaging the taxable income earned in the years 1936 to 1939, except that a loss sustained in any one of these years was to be counted as zero.

By allowing each corporation to compute its excess-profits credit on the basis of its actual earnings during the base period, Congress provided a credit which was expected to approximate the "normal" earnings of the taxpayer. Accordingly, the

excess-profits tax would be imposed only on profits which were abnormally high, or profits which might reasonably be regarded as war profits. The approximation of average base-period net income to "normal" earnings was admittedly a rough one; but for the majority of corporations the base-period years, taken as a whole, did provide a fair standard for the measurement of excessive profits.

It was recognized that there are many cases in which average base-period net income would not even approximate "normal" earnings. On the one hand, there are corporations whose earnings were abnormally high during the base-period years—firms which were favored by some abnormal event, or by the fact that these years included the crest of an abnormal profits cycle. In such cases the use of the years 1936–1939 as the base period results in the failure of the government to recapture profits which under a more rigid test of normalcy would have been deemed excessive.

On the other hand, there are those firms whose earnings were abnormally low during the base period—businesses which suffered from some disaster or unusual event, in one or more base-period years; firms in industries which were depressed throughout the base period; and new businesses which did not reach their normal earnings level until near the close, or even after the close, of the base period. Unless some provision were to be made for the relief of such taxpayers it was evident that a part of their "normal" profits would be subject to excess-profits taxation.

Congress deferred general consideration of these problems in 1940, but it was largely concerned with them in drafting the Excess Profits Tax Amendments of 1941. The concept of excess profits was substantially modified by three sets of amendments. First, an alternative method of computing the average base-period net

income was provided for the benefit of those corporations which had been growing during the base period.⁶ Second, taxpayers in computing excess-profits net income for the base-period years were permitted to disregard certain abnormal deductions which, if allowed, would result in abnormally low income for such years.⁷ Third, taxpayers were granted relief from abnormalities in base-period net income.

The adoption of the so-called "growth formula" provided a substantial amount of relief to corporations whose income was rising during the base period. In many cases it has permitted such corporations to use 1939 income as the average base-period net income. However, in other cases the fact that 1938 was a poor year has prevented growing corporations from taking advantage of this automatic provision for relief.

The growth formula has undoubtedly enabled some fully developed corporations to obtain an earnings credit which is higher than their "normal" earnings. In particular, this provision appears to have given excessive relief to taxpayers whose fiscal years end late in the calendar year. For such taxpayers the depression year 1938 falls mainly in the first half of the base period, and the fourth taxable base-period year extends into 1940, reflecting the higher level of profits generally earned in that year.

Congress moved very cautiously in providing relief for subnormal base-period

earnings in drafting the Excess Profits Tax Amendments of 1941. Adjustments for such abnormalities were permitted only if it were established that the business of the taxpayer had changed its character during the base period, or that his operations had been interrupted or diminished because of the occurrence of some abnormal event.⁸ Even if the above facts could be established, relief could not be obtained unless the taxpayer was subject to an effective rate of excess-profits tax equal to 6 per cent of the normal-tax net income, and unless the relief claimed would, if granted, reduce his excess-profits-tax liability by more than 10 per cent.

These relief provisions have been greatly liberalized in Section 222 of the Revenue Act of 1942. This Act extended relief to any taxpayer able to establish that the use of the average base-period net income would result in an excessive and discriminatory tax. Although certain circumstances under which the excess-profits tax will be considered to be excessive and discriminatory are specified in the Act, taxpayers unable to qualify under any of these specific tests may still qualify under Subsection (b) (5). This subsection permits any other circumstances to be introduced in support of a claim for relief so long as its consideration would not be inconsistent with the principles underlying the entire subsection. In addition, the limitations upon the use of relief established in 1941 were dropped.

⁶ Under this alternative method, a taxpayer was allowed to divide his base period into halves and to compute the average annual income for each of these two-year periods. If the average income for the second half proved to be greater than the average income for the first half, the difference was divided by two and this amount added to the average income for the last two years. The resulting sum could be used as the average base-period net income except that in no case could it be greater than the highest excess-profits net income for any taxable year in the base period.

⁷ Among the abnormal deductions specifically recognized were those attributable to (1) claims, awards, or judgments, and (2) intangible drilling and development costs in the case of oil wells or mines.

⁸ The character of the business engaged in by the taxpayer was considered to have changed only if (a) there was a difference in the products or services furnished; or (b) there was a difference in the capacity for production or operation; or (c) there was a difference in the ratio of non-borrowed capital to total capital, or (d) the taxpayer was in existence during only part of the base period, or (e) the taxpayer acquired before January 1, 1940, all or part of the assets of a competitor. On the other hand, high prices of materials, labor, capital, or any other agent of production, low selling price of the product of the taxpayer, or low physical volume of sales caused by low demand for such product or for the output of the taxpayer was not to be considered as abnormal.

Section 722 now gives any taxpayer whose average base-period earnings do not represent a reasonable approximation of "normal" earnings an opportunity to substitute constructive for actual base-period earnings. Although the "normal" earnings of such taxpayers must usually be reconstructed without regard to circumstances or events which have taken place subsequent to the close of the base period, consideration may be given to the normal potentialities of a firm which began business or changed the character of its operations during the base period. In this way the competitive disadvantage of the new business under the excess-profits-tax law should be substantially reduced. This section also permits corporations which were not in business during the base period to use a constructive average base-period net income if invested capital is an inadequate standard for determining excess profits.

The important changes in the base-period standard, since 1940, have thus tended to broaden the concept of "normal" profits as the base from which excessive profits are measured. In 1940, there was no clear indication of the extent to which "normal" profits might vary from actual base-period profits. Now it is clear that "normal" profits may mean the profits which a firm might have been expected to earn during the base period if it had been able to realize the earning potentialities which were clearly demonstrated at that time.

VI

The refinements which the Revenue Act of 1942 made in the concept of "normal" income were necessitated by the increase in the excess-profits-tax rate to a flat 90 per cent. Under the 1940 Act, rates had been graduated from 25 per cent upon adjusted excess-profits net income of less than \$20,000 to 50 per cent upon amounts in excess of \$500,000. The Revenue Act of 1941 increased each of the bracket rates by

10 percentage points. However, it appears from preliminary estimates that less than 30 per cent of the taxpayers who filed taxable excess-profits-tax returns for 1941 were subject to excess-profits-tax rates higher than 40 per cent, and that less than 8 per cent of these taxpayers were subject to rates higher than 50 per cent.

Although the 90-per cent rate made the excess-profits tax a very effective instrument for the limitation of war profits, this high rate also made the tax a more serious threat to the government program for keeping costs down and for maintaining a high degree of efficiency in production. In recognition of this danger, Congress wrote into the Revenue Act of 1942 several other provisions which may be expected to offset somewhat the effect of the 90-per cent rate. First, a postwar refund, equal to 10 per cent of the excess-profits taxes paid, will be made during the years which immediately follow the termination of hostilities. Second, no taxpayer will be required to meet an aggregate income-tax and excess-profits-tax liability in excess of 80 per cent of its surtax net income. Third, the unused excess-profits credit for any taxable year may be carried back to reduce the adjusted excess-profits net income of the two preceding taxable years. The carry-back of the unused excess-profits credit, together with the carry-over provided in the 1941 Act, will, in effect, give excess-profits taxpayers a 5-year period over which to average out their excess profits.

VII

In general, it must be concluded that the excess-profits tax has proven to be an effective instrument for the limitation of excessive profits. However, there are a number of situations in which this tax fails to recapture war profits. Its inadequacy is perhaps most clearly seen in the case of those firms which earned a high rate of return on invested capital during the base

period. Whether or not these high profits were excessive in terms of normal peacetime activities, they appear to constitute an excessive return from government contracts. The excess-profits tax may also fail to recapture war profits sheltered by high invested-capital credits. It also tends to freeze monopoly profits.

In other instances, the excess-profits tax falls on earnings which are not truly excessive. Cases of this sort are found among corporations which were developing during the base period but which would not have

reached full maturity for several years beyond it. Although the position of such corporations will be substantially improved by the amended provisions for relief, they will still not be so favorably situated as their more mature competitors. The tax may also be bearing unfairly on corporations which have greatly expanded their operations in order to handle war contracts. It is possible that insufficient allowance is made for the risks which many such corporations will incur in returning to peacetime operations.

SOCIAL FACTORS AFFECTING OBSOLESCENCE

C. A. MOYER

WAR CONDITIONS, as in 1917 and 1918, have again focused considerable attention upon obsolescence. Most of this attention is directed to obsolescence as it affects income taxes. In 1918 the Bureau of Internal Revenue first permitted the accruing of ordinary or normal obsolescence through the depreciation rate. During the present conflict the granting of war-necessity certificates and the use of accelerated depreciation rates result in part from the recognition of the desirability of accruing obsolescence, even though such accrual is merged with physical depreciation. Conversion of facilities to the manufacture of war supplies, and other changes which have been required in manufacturing processes, forcibly bring to the attention of accountants and owners certain factors which are present in a lesser degree at all times.

It should be recognized that obsolescence is not peculiar to war conditions only, and that the accounting for obsolescence is only one aspect of a broad problem which affects and is affected by numerous social influences.

Instead of classifying obsolescence as ordinary or extraordinary, it might be classified as "volitional" or "compulsory." In the case of volitional obsolescence a choice is possible of using the old equipment for a longer period of time or of substituting the new equipment at once. In such a case we might say that such equipment is obsolescent but that it does not become obsolete until it is taken from use. If a product or service is no longer in demand, then producers are forced to abandon equipment at once. This condition would cause compulsory obsolescence. However, in the case of improvements or the appearance of new techniques in production, a producer may often exercise the choice of using the old equipment for a longer period of time or of substituting the new equipment at once.

The question may be asked, "When should fixed property be retired because of obsolescence?" It might be said that property is obsolete when it is taken from use because of new economic or technical conditions, but that does not mean that it is taken from use because of these changed

conditions and at the most advantageous time. What is the most advantageous time? We are led to a further consideration—most advantageous to whom? Is a certain time of retirement most advantageous to all concerns which own fixed property of a particular type? Is a selected time of retirement most advantageous to the interests of owners, workers, or consumers?

From the viewpoint of the owner and of management, when should fixed property be declared obsolete? It is from this point of view that the accountant has most often had direct contact with the problems involved in judicious treatment of optional obsolescence and has had the opportunity to observe the results of choices made.

One of the important factors that a manufacturer must consider in attempting to select the most advantageous time for retirement of property is a comparison of estimated savings effected by a new process with the value to him of the potential productive power lost because of the abandonment of usable fixed property—in other words, a comparison of the savings effected with the loss suffered. Perhaps accountants are expected to be able to express in terms of dollars and cents the advantages or disadvantages of a new asset which appears as a possible substitute for one in use. But many complications appear and many assumptions are necessary when a mathematical calculation is attempted for any one case.

Attempts to determine the proper time to scrap old equipment in favor of new and to express the advantages or disadvantages of the new in terms of dollars and cents were necessary because it was obvious that in the past new inventions were often introduced in particular enterprises sooner than they should have been, whereas in other cases the introduction of inventions was delayed longer than was economically advisable.

Many collateral factors must be taken

into consideration, however, when attempting to measure the advantages secured by the introduction of new machinery. It is often very difficult to express some of these factors in terms of dollars and cents. Nevertheless, they must be considered.

For example, the possibility of the speedy obsolescence of the new machinery itself must be given due weight even before the equipment is purchased. Even though a new machine appears on the market which, if it is used until worn out, will result in a saving in production costs of more than enough to offset the loss from the abandonment of the old machine, this apparent saving may disappear entirely if the new machine should be rendered obsolete shortly after it is introduced.

In this connection, management should consider future obsolescence in selecting the type of machinery and equipment to be purchased. If obsolescence is likely to occur in the near future, then equipment of a less durable nature should be purchased than that used in industries in which obsolescence occurs infrequently. That is, an attempt should be made to avoid retirements because of obsolescence. Whenever possible, the point of retirement because of physical depreciation should coincide with the point at which cost-reducing innovations or improved equipment appears. Abandonment of unused physical capacity should be avoided as much as possible. The use of lighter built machinery, if conditions warrant it, might considerably reduce write-offs because of obsolescence.

R. R. Coombes, an English writer, advocates that British industries use "less durable machinery of lighter build and shorter working life wherever possible"¹ in order that British industries might adopt

¹ "Obsolescence and Depreciation," *Accountants' Journal*, London, Vol. LI, p. 527, October, 1933.

new methods sooner than has been the practice in the past.

Another factor which apparently is overlooked in many cases is the probable future rate of production. If equipment is purchased which has greater capacity than the old and which will give a lower unit cost of production when used to full capacity, it does not necessarily follow that the purchase of such equipment is desirable. If increased quantity of production cannot be disposed of even at lower prices, it would not pay a concern to invest in new equipment which will give greater capacity.

The rate at which replacements are installed slows up considerably in time of business depression because of the uncertainty of the future. A study made by *Business Week* discloses that in 1935, 65 per cent of metal-working machinery was over ten years old, whereas in 1930 only 48 per cent of it was over ten years old, and in 1925 only 44 per cent was of that age. What the figure may be in 1944 is anyone's guess. The presence of business depression has a retarding effect upon the introduction of new machinery. It is not intended to imply that a businessman must be able to forecast the level of business activity for the future. He must, however, pay considerable attention to future requirements, and to the market conditions which will affect the industry and the individual enterprise with which he is connected, whether he can forecast accurately or inaccurately.

The prospective substitution of new machinery for old should also take into account the probable future prices of the new machinery offered. The general consuming public knows that when a fad or style product or a new product is offered for sale upon the market, the first price at which it is offered is often considerably in excess of later prices for the same article.

For that reason, consumers often delay the purchase of such articles until a later time in order to take advantage of lower prices which follow after the novelty of a new product has worn off.

There is reason to believe that durable-goods manufacturers attempt the same sort of thing. They know they can usually sell improvements at a high price merely because they are new. The price at which such improvements are first offered is customarily higher than that at which the same thing is sold a short time afterward. Purchasers of equipment should exercise the same care in their purchases as any consumer. The prices at which improved techniques are offered should be examined carefully before arriving at the conclusion that they represent a wise investment.

Financial aspects must also be considered in a contemplated change. If an enterprise desires to retire old machinery and substitute a new type, a suitable means of financing the change must be found. A prevailing high rate of interest may discourage the change and may in fact make the change unprofitable, even though other considerations seem to point to its desirability.

If the enterprise involved has accumulated a fund for such purposes or if its current position is such that borrowing from outside sources would be unnecessary, then many of the financial difficulties may be avoided. A detailed examination of financing methods and financing problems would not be appropriate or necessary in this discussion. However, financial aspects and the rate of interest may have an important bearing upon the question of the proper time to declare an asset obsolete, from the viewpoint of the owner of such an asset.

Almost invariably, suggested criterions of retirement assume that the quality of the output will not be affected by a pro-

posed substitution of new machinery for old. Actually this assumption is usually not a valid one. The advantage of a change which improves the quality of a product is much harder to estimate in terms of money than one which does not affect the product. If the quality of the output is improved, then an attempt must be made to estimate the future volume of sales of the improved product and also the probable selling price. Then, too, the probable effect upon competitors in the same field must be thoroughly studied. A concern which brings out a product superior to that of competitors may secure a temporary advantage which will later become a permanent advantage because of the fact that it was the first one to introduce the improved product. The superior product may attract customers from competitors and cause the establishment of business connections which accrue to the permanent advantage of the concern first introducing the improved product.

After the Bessemer process of converting iron appeared in Europe, Andrew Carnegie became interested in it and bought the American rights for \$300,000. Soon after he had installed the Bessemer furnaces it was found that the English had developed an improved open-hearth furnace from the original invention of Charles William Siemens, a German. This invention had originally been made in 1861 but had never been used. It was found that the steel made in the improved open-hearth furnaces was of considerably better quality than that made by the Bessemer process.

Mr. Carnegie had a reputation for recognizing valuable improvements and for having the courage to adopt them without delay, once he had decided upon their merits. He thoroughly investigated this new type of furnace and found that the quality of steel produced was superior to that being made in his mills and so began a

gradual replacement of the Bessemer type by open-hearth furnaces.²

This new process of converting has been almost universally adopted in steel mills all over the world. However, the cost of making steel by this method is greater than under the Bessemer process, but the improved quality of the steel enables those who use it to gain an advantage over competitors who are still using the Bessemer process. This furnishes an example of volitional obsolescence in which lower costs were neither expected nor realized, yet because of the improvement in the quality of the product it was thought desirable to make the change and to scrap or otherwise dispose of existing furnaces, even though they were still capable of making steel for many years to come.

The temporary advantage secured by the installation of a new technique is discussed by an English writer who says "We may say that it pays to scrap a particular machine or method when the additional profit that is obtained by the use of an alternative method has been increased sufficiently to provide for the interest upon the unexpired value of the old technique, together with repayment of that value over the expected period of enjoyment of such excess profit."³

He continues by saying that the special gain is confined to the initiator who installs a new technique first and withholds the profits from the community as a whole. If everyone adopted the new technique immediately, prices would soon drop and so no special gain would be present. It is the lag which gives certain producers a temporary advantage. This special gain corresponds rather closely to what has

² Burton J. Hendrick, *The Life of Andrew Carnegie* (New York: Doubleday, Doran and Co., 1932) Vol. 2, p. 40.

³ Prof. J. H. Jones, "Obsolescence & Economic Progress," *The Accountant*, Vol. 90, p. 224 (June 30, 1934).

been called quasi rent of machinery. Frederick Bernard Hawley stated that "the limit of what a marginal manufacturer will pay for the use of machinery is not the interest on its cost, but the advantage it gives him over his marginal competitor who is using no-rent machinery, less, of course, the lowest profit that will induce him to subject himself to the risk involved in making the change. But he really has to make all of this, as his gain in substituting improved machinery for old is frequently many times as large as the smallest profit that would lead to the change."⁴

He explains this point more fully later by saying that "whatever the manufacturer pays for this advantage, he at first exacts its full value, or very nearly its full value, from the consumers of his product, and that without raising the price to the consumer, thus again showing us that the income arising from improved operation is of the same kind as the rent of land, in that neither of them affect the price of the product, except as the aggregate amount of the commodity brought to market is increased. Later, of course, the price is affected, but it will be lowered instead of raised. Here again its nature as rent becomes apparent."⁵

The producer who begins business with machinery which can produce at lower costs will enjoy a temporary advantage over competitors. The producer who has machinery which has been in use for some time and which is ready to be scrapped anyway, and who therefore is in a position to use a newer type than his competitors, will also enjoy a temporary advantage over his competitors. Those who have this temporary advantage may ultimately drive competitors out of business because of this difference in costs and thus secure a permanent advantage.

The question might be raised as to why all concerns in a certain industry do not adopt new machinery as soon as it appears, if they can operate at lower costs. The answer is that those concerns which have equipment that was purchased rather recently but is not of the newest type, may find that the total savings effected by the use of the latest improved equipment will not offset the loss that would be suffered from abandonment of the old. In other words, to them the machinery in use is not considered obsolete.

A country which is just beginning to develop its manufacturing and which is competing with other countries where manufacturing has long been established will ultimately be found to have certain advantages over the older countries. The new country can begin production on the modern plan and does not have the problem of comparing the savings of new machinery with the losses from the abandonment of old.⁶ The success of American manufacturers in world competition may be largely attributed to the fact that we started manufacturing under much more modern methods than those followed in older countries. Perhaps Russia may some day have a similar advantage.

In brief, we might conclude that an individual enterprise, in attempting to set up criterions of retirement, must necessarily try to forecast the entire life histories of the old and the new equipment and estimate the comparative effects of the two upon future income. In making this analysis, the following factors must be kept in mind:

1. The potential productive power lost

⁴ It should be mentioned that differences in labor conditions between new and old countries will have an influence upon the use of machinery. In new countries it is usually true that wages are high and specialized labor is comparatively scarce, whereas in older countries wages are usually lower and skilled labor is more abundant. These conditions would encourage a more extensive use of machinery in new countries than in old countries.

⁴ *Enterprise and the Productive Process* (New York and London: G. P. Putnam's Sons, 1907), p. 179.

⁵ *Ibid.*

because of the abandonment of existing plant and equipment.

2. The savings in operating costs effected by the change.
3. The possibility of obsolescence of the new machinery, taking into account the effects of this future obsolescence upon probable future costs of production.
4. The probable future rate of production and probable future market demand for products.
5. Possible subsequent decline in the price of the new machinery which is being considered.
6. Rates of interest and available means of financing the investment.
7. If the quality of the product is to be affected, then an attempt must also be made to forecast both the effects of the changes of quality upon the sales prices and the extent of the market for the improved product at the anticipated prices.

Even if every individual concern considers these factors thoroughly and uses good judgment in selecting the proper time to retire machinery because of obsolescence, the time so selected will not be identical for all concerns in the same field. Some may have purchased present equipment while prices were high; others may have installed their machinery at a more advantageous time. Therefore, the calculations of two concerns might show different results. Also, one producer may find that his equipment is almost worn out, whereas another may have used his only a comparatively short time. The financial plans of various enterprises differ widely and are bound to have considerable effect upon a decision as to the proper time to substitute improved equipment in place of that currently in use.

Consumers also are directly affected by the policies followed with respect to retirement of fixed assets because of obso-

lescence. Private business conducted for profit can not be administered solely in the interests of the consumer, but the viewpoint of the consumer is certainly an important one to be considered when discussing the question of when old machinery should be scrapped in favor of new. If a cost-reducing innovation appears which is not put into use by manufacturers, then it seems that the consuming public would receive little, if any, benefit because of its appearance, for the price of the product would tend to remain near the cost of production of the present marginal producer. Of course, the fact that a cost-reducing innovation is available might have some influence upon prices, since manufacturers might reduce prices in order to discourage new competition.

If a few concerns introduced the new method and thus reduced their costs, they would have a definite advantage over competitors and would derive what is commonly called quasi rent. It can be contended that this quasi rent tends to disappear, for, as competition for new business is extended, those producers enjoying this temporary advantage will gradually lower their prices to draw trade from those with higher costs who formerly were the marginal producers. Thus a new margin will be established as old producers leave the field. Ultimately, as the new methods are generally adopted, the costs of those remaining in business will be lowered in comparison with former costs of the industry. It has sometimes been asserted that since all firms may not, or can not, adopt improvements, those which can and do adopt them may assume a monopolistic position when prices are lowered, because of advantages which they possess over competitors. However, if competitive conditions are still present, then consumers will receive benefits from the cost-reducing innovations after the price adjustment has taken place. The benefit to the consumer

is delayed somewhat by the time involved to bring about the adjustment.

At first it may seem that, from the viewpoint of the consumer, the sooner these improvements are universally adopted, the greater will be his gain. But such is not the case, since immediate widespread adoption of improvements would increase the expenses of production caused by the use of fixed assets having a shortened useful life and would thus increase costs rather than lower costs.

Another social interest deserves consideration in a discussion of the time when machinery should be scrapped. The invention of new machinery does cause abandonment of old machinery, but it also has a far-reaching effect upon labor.

In an attempt to determine when fixed property should be declared obsolete many factors must be considered in order that the best interests of labor will be conserved. The most obvious effect upon labor is a direct reduction in the number of workers needed, because of discontinuance of production or substitution of machinery requiring less labor to operate.

A technological improvement may result in indirect replacement of workers in many ways. Production may be diverted from a competitor in the same industry, thus causing him to reduce his working force. For example, two manufacturers are making the same product for sale. One of them introduces cost-reducing machinery which enables him to reduce his prices. The other manufacturer, unable to install the new machinery, can not meet the lowered prices and as a result his volume of business declines. He is forced to reduce his working force because of a lack of orders. Thus some workers were displaced because of the adoption of technological improvements by a competitor even though the immediate cause appeared to be a decline in the business of a given concern.

Through the elimination of inefficiency

and waste, less material or less equipment may be required and therefore the labor needed in those industries which manufacture the material or equipment may be lessened. Canneries have become more and more mechanized. In addition to the labor displaced by machines which will clean and prepare food to be canned and will automatically seal cans, workers in the sheet metal works might be affected by developments. If the automatic operations involved should greatly reduce the number of cans spoiled, then it is possible that less sheet metal would be required and therefore the labor required in sheet metal works would be reduced.

Production in another industry may be affected by offering a substitute which will be cheaper or more useful than the product manufactured by the other industry. A concern which makes machine tools may reduce the amount of labor needed in an industry which uses those tools in production. An improvement in quality or efficiency of the tools sold to manufacturers may enable the latter to reduce their labor forces. Thus a change in methods of production in one industry often has an effect upon another industry which appears at first to be only distantly related.

But there is another side to the picture. It is generally conceded that the introduction of laborsaving machinery and technological advances in industry lead in the long run to a higher standard of living for labor. Since technological improvements in the long run improve the lot of workers, increase the purchasing power of their wages, reduce their working day, and otherwise raise their standard of living, it can be said that obsolescence can in the long run be advantageous to labor.

The occupational displacement of labor, which has been called technological unemployment, has been one of the most serious problems of labor since the beginning of the Industrial Revolution. In spite

of the long-run advantages of technical advances, the short-run maladjustments and the possibility that the level of production will not rise rapidly enough to offset both the increase in population and the increased productivity of labor, lead to the conclusion that, in considering the interests of labor, fixed property should not necessarily be declared obsolete as soon as an improvement appears.

From the point of view of labor, it seems that a technical improvement should not be installed until the labor displaced by such an improvement can be absorbed by other departments or by other industries or can be given temporary work of some sort until permanent employment can be found. As early as 1812, J. B. Say, in discussing remedies for technological unemployment, recommended that it would be wise to restrict "in the beginning the use of a new machine to certain districts where labor is scarce or required by other industries. . . ." In later works, however, he omitted this recommendation on the ground that such public intervention would "violate the property of inventors."⁷ He believed that such a policy would be of advantage to labor, but would not be possible because of a violation of property rights.

Public works, the expansion of service industries which require a large labor force, and the moving of the unemployed to different localities have been suggested as remedies for technological unemployment. A discussion of the merits of various remedies would be out of place here; but it should be pointed out that, if labor is to be considered, machinery should not be declared obsolete in favor of new labor-saving machinery unless means are available to take care of persons deprived of their jobs.

From all this it seems to follow that the time when fixed property should be retired because of obsolescence, if such time can be controlled, does not coincide for all interests concerned. The various groups involved have diverse interests in the matter; and a truly social viewpoint would require a careful balancing of these diverse interests and indirect effects.

Seemingly, obsolescence occurs unannounced and uncontrolled. At first thought it may seem that the control of obsolescence recognition lies with forces of competition which compel some individual enterprises to retire property because of obsolescence, and that workers, financiers, consumers, and other groups have little control over the rate of obsolescence. It may also seem that legal and political factors have no great influence in controlling the rate of obsolescence. However, a closer examination shows that some deliberately planned regulations of obsolescence and certain automatic controls exist which operate to increase or decrease its rate.

Large corporations with immense investments to protect are hesitant about installing innovations because of the obsolescence losses which would result. Since corporations are conducted for profit as well as to provide economic goods, we can not expect management to jeopardize the financial position too readily. It is understandable therefore that modern management should attempt to control the uses of new inventions in the belief that the loss to them may offset the gain to consumers.

Some corporations have carried out a definite program in their attempts to control obsolescence in their individual plants. These planned controls have sometimes resulted in a further delay of retirements because of obsolescence. Two devices have been employed for this purpose, namely, the suppression of patents and the pooling of patents. A court decision pointed out,

⁷ *Traité d'économie politique* (Paris: Chez Antoine-Augustin Renouard, 1804) p. 55.

⁸ *Ibid* (1814 Edition), p. 55.

in 1909, that "it is a fact, familiar in commercial history that patents have a commercial value for the purpose of extinction, that many patents are purchased to prevent the competition of new inventions and new machines with the old machines already installed."⁹

If a patent appears which an individual concern does not wish to use at the time because much of its existing equipment would have to be scrapped, then the concern may be able to delay the introduction of the improvement by buying or otherwise securing control of a patent and suppressing it.

This action may tend to maintain current price levels by preventing competition from reducing costs. But it may also prove to be a social benefit if it avoids a social loss from premature retirement of useful assets.

The extent to which patents have been suppressed for competitive purposes is unknown, but evidence appears from time to time that in most industries of any size many improvements have been withheld from use in order that obsolescence might not occur.

The ownership of a patent gives the holder certain limited legal and monopolistic rights. Various investigations have shown that the legal right bestowed has sometimes been used as a means of withholding an invention from use rather than as a method of permitting an inventor to reap some reward from his efforts.

A "patent pool" has been defined as "any ownership or control of a plurality of patents either by individual or company, group of individuals or companies, or by all, or substantially all, of the separate units of an entire industry."¹⁰ Patent pooling and cross-licensing agreements

have been formed in many of the important fields, such as electrical goods, automobiles, radios, and chemicals. Corporations which control these pools may choose to use the patents they hold, or they may choose to withhold them until business judgment later directs that they be introduced.

It is not intended to imply that the suppression of patents and the existence of patent pools can result only in conditions which are contrary to the public interest. Some very desirable improvements are more widely introduced by pooling than might otherwise be the case. But comparison of the advantages and disadvantages is not part of this discussion.

The pooling of patents, then, conceivably might lead to greater obsolescence if all patents of an industry are made available to the entire industry. The automobile industry furnishes a good example of this type of arrangement. The National Automobile Chamber of Commerce has handled a cross-licensing agreement since 1914, by which all patents held are available to the members of the pool. In 1930, 1,700 patents were held. Since the parts of an automobile are covered by hundreds of patents, if each manufacturer owned a number of them and prohibited competitors from using such patents, each automobile would have definite features superior to those of other cars, but each would also have some very inferior features. The result would be that such automobiles would be far inferior to those actually produced by the industry. If the patents were owned and controlled individually by the various companies, improvements probably would not be adopted so rapidly or so generally and therefore the rate of obsolescence would not be so high. Although the rate of obsolescence in the automobile industry has been very rapid, the product has improved rapidly,

⁹ *Blount Manufacturing Co. v. Yale and Towne*, 166 Fed. Rep. 555 (1909), C. C. Mass.

¹⁰ Committee on Patents, U. S. House of Representatives, *Pooling of Patents* (Washington: U. S. Gov't. Printing Office, 1936), pt. 2, p. 1199.

and a very considerable service has been performed by the used-car market. Also, it is believed that the phenomenal growth of the industry is at least partly accounted for by this cross-licensing arrangement. The airplane industry is using cross-licensing to great advantage in the present conflict.

It was pointed out that these patent controls can be used to regulate the rate of obsolescence in a particular industry. The usual implication is that obsolescence is forestalled to a considerable extent. If a firm or group of firms could stifle competition to such an extent that they could maintain existing prices, they would frequently find that it would not pay them to install improvements at once. On the other hand, a great deal of industrial research has the creation of obsolescence as its objective—that is, the improvement of the service-price ratio of the product to the benefit of the consumer.

Laboratory and research staffs maintained by large corporations may furnish them with greater control of obsolescence. By developing their own inventions they are able to control their use from the start. Therefore, they can introduce any discoveries made at any time they choose. One often hears the statement that a certain large corporation has developed a vastly improved product which it has not put upon the market because it desired to sell existing stocks and to use existing equipment as long as possible. Here again the implication seems to be that retirements because of obsolescence are probably somewhat delayed because of the discoveries and inventions made in industrial research laboratories. Yet it must be acknowledged that the desire for wider markets often spurs the introduction of improvements.

Most of the factors of control mentioned so far seem to serve to forestall completed obsolescence to a certain degree. Such a

delay of the appearance of obsolescence is not necessarily prejudicial to the public interest. The elements of control mentioned above have no doubt often served to reduce technological unemployment as well as to avoid losses to inventors. We usually say that the consumer is best served when he receives the highest possible quality of a commodity at the lowest possible price. But before subscribing to an economic system based upon this theory only, many other things have to be considered, such as industrial maladjustments, losses of investment, occupational unemployment, and possible ill effects upon private industry in general.

Labor has often exerted an influence upon retirements for obsolescence. It is natural that workers are opposed to technological changes in their particular fields when they recognize that their employment may be ended and their skills made worthless if present methods are discarded in favor of new ones. Early industrial history shows many cases in which workers have destroyed machinery and burned factories in their attempts to escape the effects of the introduction of new machinery. In more modern times, organized workers have taken other measures to attempt to control the rapidity with which technological improvements are adopted. Trade unions have sought to use organized bargaining with employers when it appeared likely that they would be affected by the technological change. The contention is often advanced that business has used technical innovations to curb the power and requests of labor, and has sometimes discarded equipment in favor of new at an earlier time than would otherwise have been done had it not been for the demands of labor. Strikes frequently induced manufacturers to mechanize their plants to a greater degree.

As far back as 1876, Samuel Smiles wrote, "In the case of many of our most

potent self-acting tools and machines, manufacturers could not be induced to adopt them until compelled to do so by strikes. This was the case with the self-acting mules, the wool combing machine, the planing machine, the slotting machine, Nasmyth's steam arm and many others."¹¹ Thus labor, while attempting to protect its own interests, has had an influence upon the time of retirements of fixed assets. In some cases retirements have been hastened; in others, they have been delayed.

Consumers make no conscious effort to control the rapidity of retirement of fixed assets, but the tendency of individuals to resist that which is new and to use those things to which they are accustomed forces producers to be hesitant about introducing anything which may be a sharp departure from things already in use. Habits formed by individuals often prevent the scrapping of fixed assets in order to manufacture products of improved quality, because producers realize that improvements in quality are not always at once accepted by consumers. For example, it took some time for telephone users to become accustomed to dial telephones. The United States Senate tried the dial telephone system and then had it removed after a short time. Sewing-machine manufacturers experienced considerable difficulty and delay when they attempted to sell electric sewing machines. This difficulty was experienced not only because consumers were not thoroughly convinced of the advantages of electric machines but also because those who owned the older type machines did not wish to assume consumers' obsolescence losses in order to use the new ones.

Consumers' tastes or preferences, of course, may force producers to discard existing property even though an attempt

is made by producers to forestall retirement of fixed assets. It is thus evident that manufacturing concerns necessarily must study very carefully the possible reactions of consumers before establishing their retirement policies. Elasticity of demand is always a most important consideration when an improved product or a decrease in price is contemplated.

Legal and political forces also operate to some extent in controlling obsolescence. Most of these forces act only indirectly as regulators, but a few of them represent attempts at direct control. Present patent laws very definitely have an influence, as was noted earlier. The fact that the holder of a patent has a legal monopoly in respect to a specified invention permits him to use the invention when he sees fit, and prevents others from adopting it without his permission. Although competitors may desire to retire certain fixed assets because of obsolescence and to use improved assets, they may be legally prohibited from doing so because of the rights of the inventor.

The United States Courts have consistently upheld the view that a patentee can not be compelled to use patent devices if such compulsion is inconsistent with the rights of private property. "The inventor is one who has discovered something of value. It is his absolute property. He may withhold the knowledge of it from the public and he may insist upon all the advantages and benefits which the statutes permit him who discloses to the public his invention."¹²

The courts also have often upheld the legality of patent-pooling and cross-licensing agreements. Some of these patent combinations have been declared illegal because they violated the Sherman Act, but the decisions upholding them are sufficient in number to indicate that the courts

¹¹ *Industrial Biographies*, (London: Harper Brothers, 1876) p. 294.

¹² *United States vs. Bell Telephone Co.*, 167 U.S. 224, p. 247.

usually consider them entirely within the law.

Vested interests have attempted through legislation and lobbies either to prevent compulsory obsolescence in their own fields or to force compulsory obsolescence in the respective fields of their competitors. The fear of obsolescence has been indirectly responsible for the passage or non-passage of legislation which affects the particular field involved. It may be that legislation and governmental policies extending and strengthening labor unions will ultimately have a marked effect on obsolescence. If the increasing power of labor unions results in continually higher wages, business may find it advantageous to supplant labor with machinery to a greater extent than ever before.

The above discussion indicates that in this country, at the present time, the obsolescence of fixed assets is controlled to a considerable extent by the manufacturers themselves. But, in exerting this control, they are subjected to many limitations and influences which keep control from being narrowly selfish. In general, the present semi-automatic control of obsolescence has brought about results that were at times beneficial to the public interest and at times seemingly not so beneficial. In recent years we have seen the government's authority over industry extended in many ways, and more are often proposed. It is not yet clear to what extent substitution of governmental regulation for business judgment is desirable in this area or how such regulations would work.

A government agency to regulate obsolescence retirements in all industries might be proposed. Such an agency could be made up of technical and economic experts who would judge the desirability of all technological changes and would select the proper time to introduce these changes into the industries affected. But the interests of all concerned would have to be

carefully canvassed and retirements so timed that the greatest social benefit would be derived.

Such a group, even though it might consist of the most capable experts in the country, would face a most difficult task since it would have to try to predict the effects which would follow its decisions, and try to foresee the industrial and other disturbances which might be caused by its policies. Not only would it have to establish general policies which would be followed in securing results most beneficial to the public interest, but it would also have to arrive at decisions in specific cases which would bring about the desired results. Certain general objectives could be determined, but the accomplishment of these objectives could not be brought about by following a general pattern. Conditions peculiar to each enterprise or to each industry or to each locality would have to be thoroughly considered in order to achieve satisfactory results. This alone might lead to a breakdown of the regulation idea.

An agency which controlled obsolescence retirements would find itself subjected to criticism at every turn. If it permitted technological changes to be introduced at a comparatively rapid rate, losses to investors would be enormous and it might be accused of considering only the consumers' interests. If cost-reducing innovations and improvements in quality were not introduced at once, consumers might accuse the agency of attempting to keep prices high for the benefit of "big business." If an attempt were made to minimize technological unemployment, investors and consumers might contend that the group was making a play for the labor vote. No matter what decisions were reached, the agency would undergo criticism and pressure from some interested groups because of the apparent partiality shown toward other groups. Political cor-

ruption and graft are possible influences which should not be overlooked and are factors which might lead to biased decisions.

The obsolescence of fixed property offers serious problems to individual enterprises and to society. Under the modern corporate system of enterprise, consumers, workers, and owners exercise varying influence over the time of retirement caused by obsolescence. But decisions of management, in most cases made voluntarily after considering these other influences, ultimately determine the policy to be followed.

The growth and development of the corporate system has seen a marked separation of management and ownership with most of the elements of control resting in the hands of a quasi-professional management. Since this control function now rests in the hands of management the question arises as to whose interests should be served by management. According to common-law concepts of private property, management should operate a corporation with the end in view of earning profits for the owners. However, since interests of owners and the controlling group may be diverse interests, it has often happened that management has strengthened its own position to secure power over economic enterprises and has then run the enterprises in order to benefit its own position rather than to serve the owners.

A recognition by management and investors of the social implications of obsolescence and a conscious attempt to serve a wide public interest in managerial decisions concerning obsolescence would no doubt result in increasing the prestige of business from enlightened, socially desirable policies. If management considered itself as a trusteeship for investors, consumers, and workers together, the func-

tions of management would become in a measure social functions. Such an attitude may be too idealistic to be widely realized through the voluntary actions of those concerned, but evidences of the recognition of social obligations by management are not unknown; education in ways and means could greatly increase the number of instances. Such recognition, and subsequent formulation of soundly social policies by industry itself, after taking into account the many factors involved, would impart many advantages to all concerned, and would certainly be superior to a system of strict government supervision.

The efforts of governmental bodies to point out the obligations of management and to encourage a more social viewpoint might accomplish much in this direction without the exercise of close supervision and regulation. The elimination of unfair practices is always desirable. Enforced recognition of the social obligations of business management is not always the wisest way to approach reform. If the social factors affecting and affected by obsolescence were thoroughly understood, private industry could itself direct attention to some of these factors and possibly reduce the pressure for governmental control over inventions, patents, and obsolescence generally. On the other hand, if government officials acquire a clear understanding of the possible disastrous post-war consequences to healthy business operations of an ill-advised and overly technical official attitude now toward allowances for expected obsolescence of wartime assets held by business enterprises, the result could very well be a definite lift to present-day business morale without departing from the principle that individuals should not profit unfairly, now or in the future, from this emergency.

MUNICIPAL BUDGETING IN WARTIME*

IRVING TENNER

BUDGETING involves both planning and estimating, processes which present problems even during peacetime. During a period of war these problems are magnified by rapid changes in conditions which make accurate forecasting difficult, if not impossible. However, many of the conditions and the budget problems to which they give rise can be anticipated. The purpose of this article is to indicate what these conditions will be during the current fiscal year, how they will affect municipal revenues and expenditures, and the steps to be taken to meet the problems which they will bring forth. Not all municipalities will, of course, fare alike and allowance will therefore have to be made for individual circumstances.

DECREASES IN REVENUES

Decreases in revenues from property taxes, licenses and permits, some state-shared taxes, and grants-in-aid can be expected. The assessed valuation of both real and personal property will decrease. Real-property assessed values will decrease because the depreciation of property as a result of wear and tear, its destruction by fire or other causes, and the reduction in its value caused by obsolescence are not being offset by new building construction.¹ Again, increased holdings of property by the Federal government mean increased exemptions. For example, during the first year of the present war, the Federal government purchased 121,368 tracts of property valued at \$284,000,000.²

Decreases may also be expected in the assessed value of personal property. These declines can be attributed primarily to two factors. The first is a decrease in merchants' stocks because of priority and rationing restrictions. The second is the conversion of factories from civilian to military production and the consequent exemption of their machinery and materials if government owned.

The property tax, as is well known, is the product of two factors—the assessed valuation and the tax rate. The only way whereby a municipality could compensate for the loss in assessed values would be to raise tax rates. At the present time, however, this is out of the question. In fact, because of rent ceilings, vacancies in commercial properties caused by rationing restrictions, and increases in Federal income taxes, taxpayers are demanding reductions in tax rates. Consequently, municipalities will hardly be in a position to raise rates; on the contrary, they may have to reduce them.

Part of each year's tax levy usually becomes delinquent. A municipality collects each year not only part of its current levy but also some delinquent taxes of prior years. Because of increasing prosperity, delinquencies of prior years have been gradually cleared up so that there has been a decline in the amount of delinquent taxes of prior years outstanding. Again, some delinquent property taxes which would ordinarily have been paid during the current year may, because of increased Federal taxes, remain delinquent. These two facts point to a decrease in collections from delinquent property taxes. Moreover, municipalities will probably collect a smaller part of the current property tax levy during 1943 because of probable increases in de-

* This article is based on an outline prepared by the writer for the Municipal Finance Officers Association and published by the Association as its Special Bulletin G.

¹ Defense public housing presents a special case. These projects do not pay property taxes but instead make payments in lieu of taxes.

² Release of Office of War Information.

linquency due to the increased Federal tax burden.

Licenses and permits are another source of municipal revenue whose yield will decline. Decreases in motor vehicle licenses and parking meter revenues may be anticipated as a result of gasoline and tire rationing. Fewer building, electrical, and plumbing permits will be issued than formerly because of the stoppage of private construction. The number of alcoholic beverage licenses issued will decline as a result of the closing of liquor stores and liquor-dispensing establishments because of restrictions on the manufacture of liquor. Since many professional men are entering the armed services, the number of professional licenses issued can be expected to decrease. The closing down of many business establishments because of rationing and price restrictions will mean fewer merchandising licenses.

Many state-collected, locally-shared taxes and state grants-in-aid will be decreased. For example, because of the decline in motor vehicle licenses and gasoline licenses caused by tire and gasoline rationing, the states will turn over to local governments a correspondingly smaller amount of these revenues. Similarly, in case a state shares alcoholic beverage revenues with its local governments, decreasing collections will force it to turn over smaller amounts to these units. With the continual increase in the number of items rationed, sales volume will shrink, with a corresponding shrinkage in state-collected, locally-shared sales taxes.

If state income taxes are not abolished or the rates reduced too drastically, municipalities which share this tax revenue with the state may expect an increase. A few states, however, have already either abolished the state income tax or reduced the rates, and measures for rate reductions are being considered by other legislatures.³ On the other hand, municipalities can

anticipate with certainty increases in utility earnings. Consequently, if a city receives part of the earnings of its utility or if its franchise taxes on private utilities are based on earnings, it can reasonably look forward to an increase in its revenues from this source.

HOW TO INCREASE REVENUES

The revenue decreases and increases previously mentioned will take place without any action by the municipality. The city can, however, take steps to counteract the trends toward decreases in revenues. In the first place, a municipality should make a thorough study of its revenue system. The effectiveness of the measures discussed later depend in part upon this study. The study should reveal whether the municipality is using fully its present powers, whether it needs new powers, and whether present enforcement is adequate to get maximum returns from present revenues.

Many new sources of revenue remain untapped. One of these is a municipal payroll tax. Such a tax was adopted by Philadelphia in 1939; it supplied 27.8 per cent of that city's total revenue in 1942. Another new source is a municipal sales tax like that of New York or New Orleans. Other possible sources include (1) a theatre admissions tax like that in San Diego, (2) a tax on fire insurance companies like that in Montreal, (3) a tax on the possession of radios and telephones,⁴ and (4) a tax on trailers like that of San Diego.⁵

Another method of securing additional revenue is that of shifting some of the

³ West Virginia and South Dakota recently repealed their state income taxes and Iowa has reduced income tax rates.

⁴ In Montreal the tax is \$2 on each radio, 25¢ per telephone apparatus connected to the central exchange, and 10¢ for each branch line.

⁵ For details concerning these and other non-property tax revenue sources, see the February, 1943, issue of *Municipal Finance*. (Published by the Municipal Finance Officers Association, Chicago.)

services formerly financed from the property tax to a self-supporting basis. Examples are the financing of sewage disposal services by means of sewer rental charges, and the financing of garbage collection through charges to residents. Licenses on businesses not previously licensed provide another source. Many municipal utilities receive services from the city and some cities pay the principal and interest on utility bonds. The municipality can secure additional revenues by having its utility pay for such services and for debt-service charges, and, in addition, by having it transfer to the general fund annually an amount in lieu of the taxes it would have to pay if privately owned. On the other hand, these revenues will be offset by payments which the city makes to the utility for light or water.

A municipality need not limit itself to securing revenues from new sources. Much additional revenue can be secured from some of the sources already in use by the following means:

1. Seeing that all present revenue laws are rigidly administered.
2. Examining each class of license to see whether the rates for some of the classes should not be raised.
3. Removing tax exemption from property not entitled to it.
4. Disposing of tax delinquent property not intended to be used by the municipality, thereby placing it again on the assessment rolls.
5. Making a special effort to collect current and delinquent taxes through special campaigns and vigorous enforcement.

INCREASES IN EXPENDITURES

Increases in expenditures may be expected because of continuing price increases, introduction of new activities resulting from the war effort, and expenditures for postwar planning. The rise in prices has necessitated and will continue to necessitate increases in salaries and wages and an increase in the cost of ma-

terials and supplies. The inability to replace equipment means increased maintenance costs. Some operating services formerly performed by relief labor must now be done by local employees. The collection of Federal taxes by payroll deductions requires additional record keeping and a consequent increase in costs.

Expenditures directly connected with the war effort will continue to be made. Civilian defense activities will have to be continued. Some municipalities are required to pay a bonus or salary to employees who enter the armed forces. The increase of population in war centers necessitates extensions of services in the form of additional school teachers and facilities, additional police, firemen, and firefighting equipment, a greater garbage-collection force, and more public recreational facilities.

Municipalities are spending money for the purchase of land to be donated to the Federal government for such purposes as airports, hospitals, and training schools. Cities have supplied and will supply as the need arises, from their rubbish and garbage collection department, the trucks and personnel to collect scrap for salvage campaigns. Many municipalities are providing space in public buildings for rationing and other boards. Some cities even pay rent for city rationing board quarters.

Postwar projects are calling for increasing expenditures. Some cities are drawing up plans for the construction of improvements after the War. New York City, for example, has appropriated \$20,000,000 for such planning. The California Highway Commission is advocating that both state and local governments expend present gasoline-tax revenues for the acquisition of necessary lands and rights so that planned state and highway improvements may be started right after the War.

These increases in expenditures will be offset to some extent by decreases in other

expenditures. Thus, we may expect a decrease in relief expenditures as unemployment decreases. This decrease, because of the rise in the cost of living, will be partly offset by increased grants to those remaining on the rolls. The postponement of construction because of government restrictions means a decrease in construction expenditures. Finally, the reduction in interest charges which will be effected either through reducing outstanding debts or through refunding callable bonds at a lower interest rate indicates a decrease in debt-service charges. To some extent these decreases will counteract the increases enumerated above, the exact degree of offset varying in individual situations.

HOW TO REDUCE EXPENDITURES

The foregoing reductions in expenditures would occur as a result of war conditions, without any effort by the municipality. A city can, however, effect further reductions through one or more of the practices enumerated below. Some of these practices, for example, operations improvements, are desirable under any circumstances. Others, such as reductions in service, can be justified only by the fact that if the municipality does not have sufficient revenue to finance all of its activities it must curtail or eliminate some of the less essential ones.⁶

An important reduction in personnel costs in all departments can be effected if employees who leave for the armed forces or war industries are not replaced but instead their work is distributed among the remaining employees. If such employees must be replaced, the replacement may be with new lower-paid personnel or by transfers from the public works department or other departments whose

activities have been reduced because of the War. Economies can also be effected through stricter control over sick leave with pay. The installation of modern labor-saving equipment wherever feasible will result in a reduction in personal service costs.

Operating and maintenance costs of motor equipment can be reduced considerably by:

1. Pooling equipment and providing for central control to see that the equipment is used only for proper official purposes.
2. Installing a good records system for motor equipment to effect savings in maintenance, gas, oil, and repair costs.
3. Providing for interdepartmental and inter-governmental loans of equipment.
4. Equipping the city garage to do repair work on all equipment rather than having it done outside at a higher cost.
5. Discontinuing cruising by radio-equipped police patrol cars and placing them at strategic locations, such as fire stations.
6. Servicing tractors and motor vehicles at night in order to keep all equipment in use.

Expenditures for such activities as public celebrations, band concerts, and publicity to attract tourists can easily be reduced. Garbage collection costs can be reduced through collecting less frequently, collecting garbage and dry trash together, keeping refuse-collection trucks working in pairs so that helpers are kept busy loading trucks instead of riding with trucks to dump and back, requiring garbage cans to be placed on curbing, and asking home owners to burn as much trash as possible.

Traffic regulation costs can be decreased through using auxiliary police instead of regular policemen for part-time traffic work, eliminating nonessential traffic signals and reducing hours of operation of others, and reducing the number of traffic officers and traffic police cars. By assigning civilian personnel to do typing and similar office work and thus relieving policemen for actual police work, police costs can be

⁶ For a detailed discussion of the reductions in expenditures made by individual cities, see *Public Management*, August to December, 1942, and January, 1943. (Published by the International City Managers' Association, Chicago.)

cut. Economies in utility operating costs can be effected by changing from monthly meter readings to readings covering a longer period of time. Street-lighting costs can be decreased through reducing size of lamps or removing unnecessary lamps. Debt-service charges can be reduced by refunding callable bonds at a lower rate of interest. Other general economies which will result in a decrease in costs include setting up a central store room in order to reduce inventories, reducing the number of telephones, consolidating files and storing correspondence not currently used, eliminating useless records, and simplifying accounting procedures.

CONCLUSION

To determine what the activities of the municipality should be during the coming fiscal year and the amount of money that will be required to finance them is not an easy job. An even more difficult task, particularly during wartime, is to estimate the

amount of revenues that will be earned or received. The most difficult problems, however, arise when it is found that the estimated revenues, on the basis of the existing revenue system and methods of financial administration, will not be sufficient to finance the contemplated activities. Officials must then decide whether they are going to raise more revenue, reduce expenditures, or do both, if the municipality is not to end its operations with a deficit.

On the other hand, if a municipality estimates that its revenues will be greater than its expenditures, it has the choice of reducing taxes or of ending its operations with a surplus. The surplus can be used to build up a fund for financing postwar construction of new projects and for maintenance which has been delayed on account of the War. The surplus may, on the other hand, be set aside for meeting unforeseen emergencies or changing conditions at the close of the War.

EXAMINATION OBJECTIVES

RALPH L. BOYD

AT THE annual meeting of the Association of Certified Public Accountant Examiners on September 15, 1941, a list of fourteen objectives relating to requirements for experience, education, and examination of candidates for the CPA certificate was adopted,¹ with the purpose of encouraging higher standards for certification and reasonable uniformity throughout the United States. It may be interesting therefore to study the existing CPA laws in the light of these objectives.

Examination objectives may be grouped into two classes: (1) those primarily ad-

ministrative in character, which would probably not need to be published in either the law or the regulations, and (2) those of such interest to candidates and others that information about them should be made public. Four of the first group can be passed by here as being principally the concern of members of the board:

Objective 9. "The various *topics under each subject* should be included in the scope of the examinations with major topics appearing frequently, and minor matters being rotated in such a manner as to cover the entire subject within a five-year cycle."

Objective 10. "Topics properly a part of one subject *should not be transferred* to the examination of another subject since in most states

¹ American Institute of Accountants, *Yearbook*, 1941, p. 33.

candidates are given final credit by subjects."

Objective 11. "The CPA examination should be set at a level to test the ability of the candidate to qualify as a senior accountant."

Objective 12. "All boards should adhere to announced examination periods."

Since this paper is based upon a study of the various state laws and published regulations, these objectives may be passed by with the observation that they appear highly desirable. They were approved unanimously by the Association and undoubtedly are being given due consideration.

Two other objectives may also be noted with no more than passing comment for the reason that laws and published regulations do not make a determination of achievement possible. Objective 8 reads:

"The general subject examinations should be extended to 2½ days consisting of three morning periods of 3½ hours each and two afternoon periods of 4½ hours each. (The examinations in special subjects required by some state laws could be held in the afternoon of the third day.)"

Little is found on this point in the published regulations. However, beginning in 1943 the American Institute examinations will be given on the 2½-day basis. This means that, because of the wide use of these questions, this objective will be practically reached this year. Forty-six states and territories now use the Institute questions. In May, 1942, they were offered in thirty-nine states. Seven other regular users did not give a spring examination. Only six state boards, those of Maryland, New Jersey, New York, Ohio, Pennsylvania, and Wisconsin, still prepare their own examination questions. Representatives of three of these states (New York, Ohio, Pennsylvania) voted in favor of the extended period and probably will desire to put it into effect locally.

Objective 6 reads, "All candidates should be required at each examination to write on each unpassed subject." The

achievement of this objective would help to eliminate the installment plan of certification. Unquestionably the standard for admission is higher if the applicant must meet the requirements of a comprehensive examination than it would be if he is allowed to write on one or more subjects at his choice over a period of years. This requirement exists only by assumption or implication in most of the states. Such a statement is not now, but could be and probably should be, included in the published regulations of the various state boards of accountancy.

Objective 5 also refers to the passing of examinations in installments. It reads, "*Credit for passing specific examinations* should be canceled unless a CPA certificate is obtained within a reasonable period of the first examination. (This period should be uniform throughout the country.)" Cancellation of credit within a reasonable period of time makes it necessary for candidates to be fully prepared or to complete their preparation promptly.

A great majority of the states allow candidates to be re-examined in one or more unpassed subjects without the immediate necessity of repeating the subjects already passed. There is, however, no uniformity as to this provision. At one extreme, a few states allow no conditioning whatever. At the other is the provision that once any subject is passed it need never be repeated. Between these extremes are regulations ranging from one re-examination in one unpassed subject to a series of re-examinations in more than one subject.

Thirteen states make no reference to any provision for conditioning in unpassed subjects. Six allow conditioning in only one subject. Nine others allow a condition in only one subject, but for this purpose consider accounting theory and accounting practice a single subject. Five states permit conditioning in any two subjects.

Only five states condition the candidate in *all* subjects not passed. Two states allow conditions in all except two subjects. Two territories merely state that their regulations will follow those of the American Institute of Accountants.

Ten states provide that if certain combinations of subjects are passed, re-examination will be allowed in the remaining subjects. Colorado requires that the candidate pass accounting and law, or accounting and auditing, to be re-examined in the unpassed subjects. Illinois, Indiana, Montana, and West Virginia require passing of either accounting theory and practice, or auditing and law, for a condition in the failed subjects. The District of Columbia requires passing of practical accounting and one other subject. Maryland requires passing of at least three subjects for conditioning in the remainder. New York requires the passing of either accounting or any two other subjects. Pennsylvania considers its examination as consisting of only two parts, accounting and commercial law; conditioning will be granted in either one or the other. There are thus exactly thirteen different varieties of regulations regarding the subjects in which an applicant may or may not be conditioned.

Not only is there little uniformity with regard to the subjects in which conditioning may be granted, but there is also no uniformity as to time limits for re-examination or as to the number of times a candidate may repeat the failed subject before being required to repeat the entire examination. The time element varies from six months to no limit whatever. The number of repetitions allowed for each unpassed subject similarly varies from one repeat to no limit on the number. In many cases in which a time limit is set by regulation; it is impossible to determine from the wording whether the candidate may attempt to pass the unpassed subjects at every examination given within the time

limit set, or whether he is allowed to appear for re-examination only once within that period.

A study of regulations shows that two states require re-examination within six months; five within one year; five within one and one-half years; six within two years; one within two and one-half years; six within three years; and one within five years. Ten states apparently have set no time limit. One state allows four trials in the unpassed subject, but a candidate must not be absent from examination for any period of more than one year.

For thirteen states, it is impossible to determine from the regulations whether a candidate may have only one opportunity to remove his condition within the time limit set or whether he may present himself for re-examination in any unpassed subject at every meeting within the time limit. Six states allow only one attempt to remove the condition. Eight allow as many attempts as there are examinations given within the limit fixed for the passing of all subjects. Seven appear to allow any number of re-examinations with no time limit whatever. In one state, the only limit appears to be that the candidate must present himself at least once each year for re-examination. In two other states the number of re-examinations is left to board option in individual cases. In another, four re-examinations are allowed, although no specific time limit is stated.

From these factors it is clear that no uniformity yet exists in this very important objective of maintaining high standards by limiting re-examinations. Without a doubt, uniformity is needed at a high level in regard to time limit, number of subjects, and number of repetitions allowable prior to complete re-examination.

Objective 13 provides, "Examination solutions should be accepted whether prepared in *pen* or *pencil*." (The applicants should submit their identification cards in

ink.) At the present time, eleven states require that solutions must be in ink. A few of these states allow the working papers used to aid in solving problems to be prepared in pencil, but require all solutions to be written in ink. One state gives the candidate a doubtful choice between use of ink and use of a typewriter. One other state requires that candidates must furnish ink but makes no statement that ink will be required. Thirty-five states make no reference to use either of ink or of pencil. Many regulations state that writing must be legible and that the board will accept no responsibility for inability to read the candidate's illegible writing. It is presumed that in these states either pencil or pen may be used at the candidate's choice. One other state board regulation indicates that ink is preferred but implies that pencil may be used. Only the board regulations for Colorado and the District of Columbia definitely provide that either ink or pencil is acceptable. Clarification and uniformity on this point could easily be achieved by state board action.

Objective 14 states, "Examination papers should be graded on a *percentage* basis, in accordance with the laws of the various states, instead of by letters A, B, C, and D." Twenty-four states now make no reference in their regulations to the basis of grading or to the passing grade. Whether or not letter grades are used in some of these states is not indicated. There are, however, no state regulations which refer to grading by letters, or by "pass" and "fail," or by any method other than percentage. Twenty-six states definitely refer to a percentage basis through a requirement that the passing grade in each subject shall be 75 per cent. Two territories follow the Institute's regulations.

Objective 7 provides, "There should be *four separate subjects* in the general examination; namely, auditing, law, accounting theory, and accounting practice. Each

should be the subject of at least a half-day examination." This was the only examination objective which did not receive unanimous approval at the September, 1941, meeting. Representatives of two states expressed the belief that a separate examination should be given in "taxation."

Almost all the states at present require examination in the subjects of accounting theory, accounting practice, auditing, and law. In some states separate examinations are given in each subject. In many others accounting theory and practice are combined as one for grading purposes even though the examination is given in two parts. In still other states, subject matter from all these fields is included in the examination given, although not separately listed in the same four divisions. A few states give examinations in these subjects and additional examinations in other subjects. Since forty-six of the fifty-two states and territories use the American Institute of Accountants' examination questions, it may be said that the stated objective with reference to subject matter is now substantially reached. Laws and regulations, however, do not reveal the extent to which uniformity actually exists.

Reference to the four general subjects is made either by law or regulation (mainly in the law itself) in forty-six states. Many refer to the combination of accounting theory and practice as one subject; a few refer to the use of American Institute examination questions; some list the four major subjects and also state that other subjects will be covered if deemed necessary or desirable by the board. In the District of Columbia no reference is made to any examination in auditing. Pennsylvania refers only to "commercial law" and "general accounting." Colorado and Oklahoma refer to an additional examination in governmental accounting, although Colorado by regulation states that governmental accounting will be included in the

examination in accounting theory and practice. Ohio and Puerto Rico provide for separate examination in "taxation"; the regulations of the Ohio board, however, provide that taxation may be combined with other subjects. Louisiana provides for a separate examination on "income tax procedure and practice." Maryland refers to "principles of economics." The Maine law refers to examination in "business systems," but regulations provide that systems shall be covered in other subjects.

Michigan is the only state which requires two separate examinations, one prior to securing specified experience and one thereafter. The first examination covers the subjects of theory of accounting, cost accounting, commercial law, auditing, economics, and public finance. The second examination, given after two years of approved experience, covers the subjects of practical accounting and public auditing.

Objective 7 seems already to have been very generally met in the various states. If subjects other than auditing, law, accounting theory, and accounting practice are required, they are now usually in addition to or included in these four main subjects. The recommendation for separation of accounting theory and accounting practice into two separate examinations has not been generally followed, at least for grading and for conditioning purposes.

Objective 1, relating to evidence of good moral character and proper experience, is one which must also be considered here only in passing. It states "Evidence of good moral character and accounting experience should be developed, by boards using various means, including personal interviews." This is another case, like some of the examination objectives, in which laws and regulations can not of themselves accomplish the desired purpose. Only board policy and action in each individual

case can achieve this objective. No one would question that a state board should do all in its power to be sure that a candidate is of good moral character. In fact, it seems highly desirable to prevent certification of anyone who has characteristics which might later require action for revocation of a certificate. But it is difficult to see how this is to be accomplished without complaint by the applicant and occasional court action to force admittance. Evidence of experience is much easier to secure; yet even here the task is difficult and probably impossible in some cases.

The fundamental basis for a profession is adequate technical training for practice made evident through a comprehensive, thorough, technical examination. Through the efforts of the American Institute of Accountants, its Board of Examiners, and the members of state boards, accountancy has acquired the characteristic of satisfactory examination for admission. But we have not yet reached the point where it is universally recognized that candidates for certification have been adequately prepared for admission to the profession.

Objective 3 reads, "Experience should be required *before* admittance to the CPA examination." The purpose of this objective undoubtedly must be to secure evidence that a candidate has had this type of preparation for the examination and for public practice. It would probably be better if the words "technical preparation" were inserted in place of the word "experience." By technical preparation is meant training in accountancy acquired either by satisfactory completion of approved college courses, by experience in accountancy work, or by a combination of both.

A survey of the requirements of laws and regulations with regard to experience shows that only three states have neither an experience requirement nor a technical education requirement, to be applied either before or after examination.

Of the forty-nine states and territories which do require some sort of experience (although some allow substitution of technical education), twenty-one allow the candidate to secure his experience either before or after examination. Twenty-seven meet the stated objective by requiring experience (or technical education as a substitute) *before* admittance to examination. As noted above, Michigan has a double requirement through its use of two examinations. In that state, either experience or technical education is required before admittance to the first examination. Those successful in this examination must then secure public accounting experience prior to final examination for certification.

Existing requirements as to experience indicate both a lack of uniformity and a divergence of opinion. If adequate preparation for *admittance to examination* is the purpose of the objective, only 53 per cent of the states are now meeting it. If the purpose is to secure *evidence of preparation for certification prior to public practice*, 94 per cent meet the requirement. Whether experience should be gained before or after the examination does not seem to be nearly so important as its desirability prior to engaging in public practice.

There is further lack of uniformity with regard to experience requirements. Objective 4 refers to the acceptance of private accounting as partial credit toward the experience requirement. It reads, "Private, as distinguished from public, accounting experience should *not* be accepted for more than one-third of the experience requirement and only upon a reduced basis." This objective is still far from attainment. As already pointed out, three states have *no* experience requirement for obtaining the CPA certificate. Only three states provide that *all* the experience required must be obtained in public accounting practice. Eighteen others require that some part of the experience must be secured in public

accounting practice, and that other types of experience or training may be substituted in part. The remaining twenty-eight states and territories that require experience provide that other types of training may be *completely substituted* for public accounting practice.

The types of experience, other than technical education, acceptable as substitutes for public accounting may be classified as follows:

1. Work as an auditor or accountant for the government—twelve states.
2. Accountant or auditor for private enterprises—twenty states.
3. Board discretion in individual cases—eight states.
4. College teaching of advanced accounting—one territory.

The elimination of duplications from this classification reveals the fact that thirty-eight different states and territories give direct recognition to types of accounting experience other than public accounting.

The long list of states which allow either partial substitution or complete substitution of other types of experience for experience in the practice of public accounting may perhaps indicate that emphasis has been placed not so much upon the value of certain experience as such, but rather upon making admission to the CPA examination a limited privilege, because inexperienced people should not be admitted to practice.

Undoubtedly provisions allowing certain kinds of substitutions have been included in some of the laws because of pressure by private accountants and governmental employees. It is also probable that state boards have in certain instances adopted regulations requiring practical experience in order to prevent immature and inexperienced individuals from making attempts to secure certification.

Requirements for experience have probably operated to prevent some candidates, otherwise qualified, from making application for certification. There is no reliable evidence, however, to show that such requirements have been helpful in aiding the accepted candidates to pass the examinations. In fact, the large number of failures year after year seems to indicate that greater emphasis needs to be placed upon technical education in accountancy and related subjects than upon time-serving experience. So long as public accountancy was confined almost entirely to auditing, experience in auditing appeared to be the best evidence of qualification for admittance to the profession. The lack of facilities for technical education in accountancy during the early days of the profession in this country was also a contributing factor to the need for public accounting experience as a basis for admission to the test.

The broadening of the services of professional accountants so as to include much of the field of financial management; the growing tendency of industrial enterprises to employ internal auditors; and the increased emphasis in the literature upon principles and standards, rather than techniques—these conditions make it highly desirable that public accountancy recognize professional standards through legislative or regulatory requirements for technical education. This desire is expressed in Objective 2 which reads, "*Education at the collegiate level should precede entrance into public accountancy.*" Accountants in general and leaders of the profession in particular are not yet agreed upon this point. This is evidenced by the fact that the education objective was adopted by the affirmative vote of only seventeen out of twenty-six states represented at the 1941 meeting of the Association. Thus the objective was adopted by a vote of 65 per cent of the states represented.

It is not clear whether the objective refers to general college education or to technical education in accountancy at the college level. Neither is it clear whether it refers to the completion of a minimum number of semester hours or to the possession of a college degree. Regardless of its vagueness, however, it is certain that only small progress has so far been made toward accomplishment of this highly desirable objective. Generally speaking, the educational basis of the profession has been much neglected.

Some states have not yet fully accepted the idea that even a high school education is necessary. In one state, although regulations provide for a high school education or its equivalent, an applicant more than twenty-five years old may be excused from this requirement. Five states provide for waiver of high school education on the basis of "sufficient commercial experience." Another allows waiver of high school education to candidates over the age of forty-five years, if they have had ten years of practical experience in public accounting. One makes no provision whatever, by either law or regulation, for requiring a high school education, although an original law contained such a provision and board members state that it is still demanded. In all other states, mostly by regulation, high school education is required.

Only one law specifically requires a general education (i.e., nontechnical) beyond high school. California requires that beginning January 1, 1944, every candidate for the CPA examination must have had at least two years of general college education or its equivalent.

New York, by requiring a college degree with a major in accountancy, implies that about two years of general college education will be necessary.

In Pennsylvania, the board recognizes, but does not require, higher education by

ruling that a general college education may be accepted in lieu of two of the five years of practical accounting experience otherwise required.

The Kansas regulations appear to make a requirement for sixty semester hours of college work. However, they provide in another place that a candidate with five years of approved public accounting experience may take the examination and obtain a certificate immediately if successful. Candidates admitted on the basis of sixty semester hours of approved college work must have at least three years of public accounting experience, either before or after the examination, before a certificate will be issued. No provision is made that the approved college work must be in accountancy. The regulations, in effect, merely allow the recognition of two years of general college education to be substituted for a part of the five-year experience requirement.

A greater trend is evident toward higher requirements for technical education than for general education. Much more has been written about general education for CPA candidates than would measure the actual accomplishment.

Recognition of college training to date has been largely through allowance for substitution of accountancy education for experience, or through granting of the privilege to sit for the examination prior to securing required experience.

Twenty-three states and territories now give recognition to technical education in accountancy. Almost all of the progress toward the formal recognition of accountancy education has been made through regulations of the state boards.

The CPA law of New York alone actually requires at the present time that all candidates for the examination must have completed an approved course of study in accountancy. This is in addition to experience requirements. Rules of the New

Jersey board of accountancy require that beginning January 1, 1944, every candidate for examination as a certified public accountant must have completed an approved course of study in accountancy. Two years of experience in public accounting will also be required of candidates. No other states have made provision either by law or by regulation that every candidate must have completed approved courses in accountancy.

Only two states now definitely provide a requirement for accountancy education of all candidates. However, twenty-one additional states give some recognition by law or board regulation. Sixteen allow partial substitution of such education for experience requirements. One recognizes accountancy education only to the extent of allowing candidates with approved training to take the CPA examination prior to obtaining experience. Four states now recognize accountancy education as the complete equivalent of experience. In those states, successful candidates with approved educational training in accountancy may be granted certificates without the further necessity of meeting any experience requirements.

The profession of law is far in advance of accountancy in attainment of an education objective. For admission to the bar fifty-one states and territories require two or more years of professional study in law. Only one CPA law and one state board of accountancy come up to this standard. Forty-seven states and territories require the equivalent of two or more years of general college education prior to beginning professional law study. Only one CPA law requires some general college education at the present time, and one other has provided for such a requirement in the future.

With regard to practical experience, however, the situation is reversed. In only five states must candidates for the bar

examination have had some office experience. For public accountancy, however, forty-nine state laws or regulations refer to practical-experience requirements. The legal profession emphasizes education; public accountancy continues to emphasize experience.

This lack of an accountancy education requirement for CPA candidates appears to be due not to legislative or regulatory difficulties, but to failure of public accountants and their leaders to recognize its desirability. In most states, improved standards for such experience and education could be adopted by board regulation without the necessity of amending the public accountancy laws. In only a few instances would it probably be necessary to secure a legal amendment to obtain desired standards.

An analysis of state laws and regulations reveals that higher standards of general education and the recognition of technical education in accountancy may be secured by board action in many states. In sixteen states provisions of the CPA law give the administrative board the power to regulate the education and experience requirements. In nineteen other states the wording of the law is such that it may easily be construed to give the state board such power. Thus, thirty-five states could probably meet increased education and technical training requirements without the necessity for legislative action.

If there is doubt concerning the power of the board to raise the general education requirements above the high school level, there is a very strong possibility that, in the event of litigation, court action would sustain the ruling of the board. It is entirely probable that the courts would rule in many instances that the educational requirement set by the law was a minimum requirement, intended to prevent state boards from allowing a lesser education,

and was not to be construed as setting the absolute requirement.

No one today questions the thoroughness and impartiality of examination for certification. The uniform examination and the high standards maintained by the various state boards of accountancy have done more than anything else to give CPA certificate holders their present universal recognition as qualified experts for the practice of public accountancy. To gain complete recognition as professional men and women, however, much improvement is still needed in the requirements for general and technical education prior to certification.

Serious consideration should be given to the proper relation of experience and education in accountancy, as well as to the desirability of raising the standards of general education. The immediate objective of state boards of accountancy should be insistence upon technical education in accountancy as part of a high experience requirement, those without such training being required to undergo a much longer period of experience. Wider general recognition of public accountancy as a profession depends to a great extent upon the development of requirements for college education and college training in accountancy. Eventually a standard should be reached to provide that all candidates for the CPA examination shall have the equivalent of a general college education and approved training in college courses in accountancy, and that at least one year of public accounting experience will be required before certification for public practice.

If the regulations in every state were to be revised to bring them as nearly as possible into line with the fourteen objectives adopted by the Association of Certified Public Accountant Examiners, progress in the future would be facilitated.

POLICIES AND PROCEDURES IN FEDERAL CIVILIAN PROCUREMENT¹

CLEM C. LINNENBERG, JR.

PART II

BASIC STATUTORY RESTRICTIONS

THE PROCUREMENT officer of a Federal civilian agency which has been spending about three million dollars per year on matériel and nonpersonal services has remarked:

"Commercial purchasing requires a knowledge of manufacturing, construction, and availability of all types of commodities. In addition to this knowledge respecting purchasable items themselves, a commercial purchasing officer must know the fundamentals of contract law which affect his contracts.

"Governmental purchasing, on the other hand, depends to a large degree upon the familiarity of the purchasing officer with government rules and regulations. He must also be thoroughly familiar with the fundamental principles of contract law, and the manner in which this law is affected by the government regulations. While he must be somewhat familiar with the manufacturing, construction, and availability of commodities used by the government, these are determined to a large extent by Federal Specifications."²

Buying for the government is subject to a vast aggregate of statutes, Executive and administrative orders, legal interpretations by the General Accounting Office, and court decisions. Some rules, such as those relating to standardized specifications, have their parallel in private business enterprises. Others have, but only if one forgets that a rule-making power vested in Congress and a separate administrative responsibility vested in a department head are likely to afford much less flexibility of

rules than exists where not only administrative responsibility but also a generous measure of rule-making power are vested in a single manager. The contrast is all the greater if the business concern which the manager runs is not itself a body of such great size as to have the sort of complexity which characterizes governmental organization.

Businessmen selling to the government frequently find the regulations on procurement bewildering because so numerous. Federal procurement officers have their own problem from these regulations. The "operating" divisions of a department demand an article, or a rate of speed in getting it, that will conflict with a law or ruling. The head of the purchasing division is thus pressed between demand and prohibition or—if he is not a routinier—between prohibition and his own sense of the way things should be done in a given situation. But the prohibitions stem chiefly from a desire to protect public funds from the occasional unscrupulous official and consequently cannot be lightly condemned.

There are prohibitions against particular objects of expenditure. For example, an enactment of 1935, since superseded, banned with some exceptions the government's purchase of passenger automobiles costing more than \$750 each. Similar limitations appear in appropriation acts, each such limitation usually being applicable only to the funds provided in the particular act.

There are several statutes which limit

¹ Part I of this article appeared in the January issue of the ACCOUNTING REVIEW.

² Taylor H. McCauley (then Chief of the Procurement and Property Division, Social Security Board), in a lecture at American University.

the amount and timing of procurement, for the purpose of keeping the power of appropriation on Capitol Hill. Thus, with certain exceptions, "No contract or purchase on behalf of the United States shall be made, unless the same is authorized by law or is under an appropriation adequate to its fulfillment. . . ." (*Revised Statutes* 3732.) R. S. 3733 is a restrictive measure similar in effect but applicable only to construction. R. S. 3679 provides that no agency "... shall expend, in any one fiscal year, any sum in excess of appropriations made by Congress for that fiscal year, or involve the government in any contract or other obligation for the future payment of money in excess of such appropriations unless such contract or obligation is authorized by law. . . ." (In civilian procurement other than construction, it is very unusual for Congress to enact such an authorization, in advance of appropriating funds to pay for what is to be procured.) R. S. 3679 does not mean that funds must be disbursed within the period to which they relate. Nor do this provision and R. S. 3732, as judicially and administratively construed, forbid the *signing of a procurement contract*—whether definite- or indefinite-quantity—in advance of the period to which funds for it relate. (21 *Comp. Gen.* 864.) According to one prevalent practice, if a contract is signed not only before the new appropriation period has begun but also before the appropriation bill has been finally enacted, the contract includes a proviso that the contract is contingent upon the existence of an appropriation. In any event, with reference to an indefinite-quantity contract, funds are obligated by the respective purchase orders issued under it, not by the contract itself, irrespective of whether the contract period falls entirely within a single fiscal year.

Funds for procurement (other than construction) or for nonprocurement pur-

poses are usually made available in and for a single fiscal year. At the end of the period, any unencumbered balance reverts to the Treasury: "saving" to attain independence of more than a year's duration is not allowed. Furthermore, there is a permanent statutory prohibition (R. S. 3735) against making Federal supply contracts "for a longer term than one year. . . ."

There are various permanent procurement laws embodying public policy directed toward ends quite separate from the inexpensive purchase of matériel. The "Buy American" Act of March 3, 1933, provides that, with certain exceptions "... only such unmanufactured articles . . . as have been mined or produced in the United States, and only such manufactured articles . . . as have been manufactured in the United States substantially all from articles . . . mined, produced, or manufactured . . . in the United States, shall be acquired for public use" or utilized in the performance of Federal construction contracts. Enforcement is by means of stipulation in procurement contracts, with provision for blacklisting for three years each contractor who is found to have violated the stipulation. There is no special machinery for enforcement of the Act, but in some respects the General Accounting Office has served that end.

As far back as 1868 there has been a law providing criminal penalties for the employment of any mechanic or laborer on Federal construction in excess of eight hours per day. There is also a contract-stipulation scheme, provided by law, for the same purpose. Both relate to contractors and subcontractors alike. The criminal-penalties scheme applies, in addition, to construction on force account (construction managed directly by the government, instead of indirectly through business firms). The contract-stipulation system applies not only to construction but

also to some services and to supplies of sorts usually made to order.

The Davis-Bacon Act, adopted in 1931 and broadened in 1935, provides that contractors on Federal works must agree to pay no less than the prevailing rate of wages (in the city or other civil division) as determined by the Secretary of Labor. Contracts below the \$2,000 level are exempted. Contractors found in violation are blacklisted for three years. The Comptroller General is required "... to pay directly to laborers and mechanics from any accrued payments withheld under the terms of the contract any wages found to be due ... [them] pursuant to this Act" A law of 1934 makes it a criminal offense to exact a "kick-back" from persons employed on public works financed wholly or partly by the United States.

The Walsh-Healey Act, adopted in 1936 and relating originally to the procurement of supplies, was extended in 1939 to apply to the contract construction of naval vessels. If the matériel or vessel is priced higher than \$10,000, the contract must stipulate: (1) that the contractor is "the manufacturer of or a regular dealer in" the article being procured; (2) that he will pay not less than "the prevailing minimum wages [as determined in advance by the Secretary of Labor and stated in the contract] for persons employed on similar work ... in the locality in which the ... supplies ... [or vessel is to be] manufactured or furnished ..."; (3) that he will adhere to a maximum eight-hour day and forty-hour week per employee; (4) that he will not employ child labor; (5) that the work environment will not be dangerous to the employees' health or safety. The General Accounting Office has held that, as applied to an indefinite-quantity contract, the *estimated* quantity is what is to be measured against the \$10,000 standard. Regulations issued by the Secretary of Labor in 1936, and still in effect, relaxed

the hours restrictions to permit overtime, at time-and-a-half or better. The Act makes the contractor liable for liquidated damages to the government with respect to violations of the contractual stipulations. Penalties for violation include blacklisting for three years or less.

The Act does not apply to subcontractors. The "regular dealer" requirement is intended to prevent a manufacturer-supplier from "selling" to a spurious "dealer," a puppet of his, who will in turn sell to the government. If this requirement were effective, it would still leave genuine subcontractors outside the law; but in actuality there has been a substantial number of spurious subcontractors (manufacturers with captive outlets) who have escaped jurisdiction, leaving the Act's benefits to only the few employees of the outlet. The substantial number of contracts barely under \$10,000 (e.g., \$9,999.99) has indicated another sort of ingenuity in both the government and the business world.

Since the spring of 1940, various new enactments and orders have suspended the basic statutory restrictions on procurement, or have provided exceptions to them, or have authorized suspensions or exceptions. These special dispensations have been more common in military procurement than in civilian. As early as June, 1940, a strategic and critical materials appropriation was made, "to be immediately and continuously available until June 30, 1942" With respect to the tremendous sums involved, this provision and others in appropriation acts have greatly reduced the significance of R. S. 3679, 3732, 3733, and 3735 as limitations on the length of life of procurement contracts. Sundry for-the-duration exceptions to the Walsh-Healey Act have been ordered by the Secretary of Labor in the past year

* Public No. 611, 76th Cong.

(pursuant to authority in the Act itself), some of these being limited to contracts for war purposes and others being equally applicable to military and to civilian procurement. The latter are illustrated by an order of November 11, 1942, lowering from 18 to 16 the minimum age for employment of girls on any Walsh-Healey contract. There have been comparable modifications of other labor legislation concerning Federal procurement. (See Executive Orders 9196 and 9231.)

In the enforcement of the laws with which Federal procurement is hedged about, the General Accounting Office figures much more largely than the courts. Infractions of those laws usually are less classifiable as criminality than as inept or culpable administration, or as an admirably motivated if indiscreet effort to get a job done even at the cost of scissoring some red tape. As to the possibility of civil suits by suppliers, there is a goodly amount of litigation in the Court of Claims by persons who the government admits are contractors or who allege that they have been awarded contracts. But the most common remedies are administrative and legislative, not judicial.

AWARDS BASED ON ADVERTISING

The first statutory requirement of advertisement for bids in Federal procurement was laid down in 1809. It required that all purchases of supplies and services "... be made either by open purchase, or by previously advertising for proposals respecting the same. . . ." Twenty years later the Attorney General ruled that the second of the two alternatives must be used, unless immediate delivery be necessary. "Open purchase" was defined by him as "purchase at the places where articles of the description wanted are usually bought and sold, and in the mode in which such purchases are ordinarily made between individual and individual." Congress and

various Attorneys General rang the changes upon this rule of 1829 for thirty-odd years. In 1861 it took a statutory form which has continued to our own time, varying only as to the exemptions which sundry agencies have induced Congress to confer—exemptions small and large, temporary and permanent. Among purchasing officers it is known as "3709," by reason of its being Section 3709 of the *Revised Statutes*. It reads:

"Except as otherwise provided by law all purchases and contracts for supplies or services in any of the departments . . . except for personal services, shall be made by advertising a sufficient time previously for proposals respecting the same, when the public exigencies do not require the immediate delivery of the articles, or performance of the service. When immediate delivery or performance is required by the public exigency, the articles or service required may be procured by open purchase or contract, at the places and in the manner in which such articles are usually bought and sold or such services engaged, between individuals."

The General Accounting Office, the Court of Claims, and the Supreme Court have all held that R. S. 3709 is mandatory and that contracts made in violation of it are not valid.

R. S. 3710, enacted in 1868, provides that, "Whenever proposals for supplies have been solicited," the bidders shall be notified of the time and place of opening the bids, and be permitted to be present at the opening, at which a record of each bid shall be made. As construed, R. S. 3710 requires publicity of bids to every one who chooses to attend the opening. Likewise, every one is privileged to learn all the offers when the bids are submitted orally and individually, provided that, in the given situation, R. S. 3709 applies.

R. S. 3709 has long been interpreted as meaning not only what it says but also that the government must accept the lowest responsible bid. A business firm notorious for failure to deliver on time or for delivering below specifications can be

ignored—or even, for a short period, debarred from bidding. Similarly, the awarding authorities are required to disregard any bid which on its face makes clear that the specifications of what is offered are below those in the bid invitation. The rationale of 3709—not to be confused with the law's results—is twofold and has been spelled out in various decisions of the Comptroller General. (1) The purchasing officer is faced with every businessman able and willing to supply what is to be bought—and thus there can be no collusion between the officer and a supplier. (2) The government gets the benefit of the lowest price the market affords. The process is intended for the mutual advantage of the government and of the most efficient business firms.

The government, like many other buyers, has long been plagued with identical bidding. The GAO has, with rare exceptions, insisted that, if the lowest bid is common to two or more bidders, award must be made by lot. Secretary Ickes, whose Bureau of Reclamation has bought tremendous quantities of cement, grew weary of the basing-point system and began a practice of making the award to the bidder farthest removed from the delivery point—"on the theory," he said in 1936, "that we would get a little extra railroad employment out of it anyhow." The GAO would not permit his scheme. (16 *Comp. Gen.* 538.) The publicity which the government applies to bids received by it has, according to Congressional testimony from the business world, discouraged price competition among bidders on government contracts. The mechanism called the "open price association" long ago was attacked by the government in its sovereign capacity; but the government as a buyer neatly if unintentionally effectuates the same principle against itself, informing rival firms as to each other's bids. Moreover, a system of award by lot is precisely

what collusive identical bidders need to prevent dissension among themselves. Open prices openly arrived at may perhaps be essential to honesty on the part of purchasing officers or (from their standpoint) essential to preventing criticism of them. But compulsory award by lot is totally indefensible.

R. S. 3709 covers a few government-owned corporations and all other Federal agencies, both civilian and military, with the tremendously important proviso that, as noted below, World War II has brought temporary suspensions of this law with regard to some huge portions of Federal procurement. In addition to 3709 there are enactments similar to it which are applicable to individual agencies, subject or not subject to 3709.

R. S. 3709, as construed by the Comptroller General, applies to all commodities bought by the government, all government construction contracts, and all nonpersonal services (i.e., all services other than direct employment of persons). Illustrations of nonpersonal services are the leasing of real estate; the rental of equipment, and contractual stenographic reporting.

Advertisement for bids (invitation to bid) pursuant to 3709 usually occurs no less than ten days in advance of the deadline for submittal of bids, which coincides with the opening of bids. Advertising methods are diverse. The *Government Advertiser*, a periodical published in Washington on newsprint and consisting solely of advertisements by business concerns and Federal advertisements for bids, is supported by subscription fees and commercial-advertising fees. Federal bid invitations are published without charge. Government purchasing officers also insert paid advertising (for bids) into other periodicals, such as newspapers and trade journals. Public posting and invitation by telegraph and by mail all see service. Mailing lists are compiled for repeated use or

ad hoc. Past experience, *Thomas' Register*, and advice from Congressmen are among the sources. Such Congressional advice may possibly be fruitful and in any event cannot cause payment of excessive prices if (as under 3709) award must be to the lowest bidder.

The Attorney General, the Comptroller General, and the latter's predecessor, the Comptroller of the Treasury, have all long since held that the method of advertising pursuant to 3709 is a matter of choice by the purchasing agency—certainly an essential sort of discretion. In the past the General Accounting Office has hardly been literal in applying this principle. Yet advertising structures even frailer than those condemned by the late Comptroller General McCarl remained standing all through his tenure.

The advertising pursuant to 3709 is a lucid example of the limited extent to which laws can produce good administration. A notice thumb-tacked to a bulletin board in a public building unfrequented by suppliers, a mailing list compiled with neither zeal nor information, shy little announcements in general newspapers published in towns that include the locations of an excessively small number of the possible bidders—each of these finds its use, alone or in combination, in the buying units' "conformity" to 3709. Effective advertising is also used, but it is a product of administrative ability, not of legislation.

EXCEPTIONS TO ADVERTISING REQUIREMENT

There are numerous specific statutory exceptions from 3709, each of which concerns a single agency or an even narrower range of activity, such as the Indian field service. The typical exception applies to any individual purchase in which the cost is not greater than a sum named in the statute. Exemptions usually are enacted by means of appropriation measures and

either are permanent or are limited to the respective current appropriations. The purpose of exempting small purchases from 3709 is to permit simplified procedure where the benefits it may bring the government are less than the bother. As of a recent date there were at least 38 permanent authorizations to make civilian purchases without reference to 3709, the most typical size limits being \$50 and \$100. Another, less common type of exemption has no size limit for individual transactions but is limited in the aggregate. Even apart from special dispensations enacted by reason of the present war, the War and Navy Departments enjoy much wider freedom from 3709 than civilian agencies do. Thus, for thirty-six years the Army and Navy have had a permanent exemption with a \$500 limit, in addition to unlimited exemptions with respect to specified types of matériel.

The General Accounting Office has long recommended that a "standard general exception" to 3709 be enacted, as permanent legislation, applicable to the entire Federal government. All other exceptions, permanent and temporary, would be dispensed with. Thus in his annual report for 1931 the Comptroller General spoke with disfavor of "... some 66 differing authorizations and various happenings to be borne in mind in determining whether a particular open-market purchase ... is or is not within a statutory exception to the general advertising rule." The GAO has objected that this diversity confuses the procurement officers and the suppliers. Procurement is too decentralized for the former to be thus confused. As for the suppliers, they find it convenient to accept the procurement officer's word that he has authority to buy in the manner he is using, just as they find it convenient to assume that he has not already spent all of his money. But the disbursing officers (since the centralization of disbursing) and

the GAO very probably do find the diversity confusing. No reason appears why the Departments of Commerce and Labor should have exceptions differing so widely as \$25 and \$100. On the other hand, it is probably sensible that the Botanic Garden has separate exceptions for office supplies and for nursery stock (a commodity not necessarily subject to precise specifications), which differ so widely as \$50 and \$300.

In 1940 Congress adopted an act which brought into one place nearly all of the previously existing permanent explicit exceptions to 3709 and repealed their respective old versions. But, despite a rather misleading title, it leaves almost every exception precisely as before in scope; many of the exceptions are even worded precisely as before; and no policy is declared against temporary exceptions in appropriation acts.

Both for economy and for happy relations with the GAO, some agencies have customarily avoided buying anything, even an item so comfortably within a statutory exception to 3709 as a twenty-five-cent gadget, without soliciting bids from several sources—e.g., by telephone. Documentation of this fact is then supplied to the GAO.

The splitting up of purchases is a device very occasionally used by one Federal agency or another to enable it to buy without regard to 3709. In 3709 exceptions, the effectiveness of the statutory distinction between small and large purchases depends in substantial measure on the procurement officer's good faith; his conception of what purchasing procedure, in a given set of circumstances, is most promising; and whether a single object costing several hundreds of dollars is to be bought or many smaller items aggregating the same amount. Thus, without soliciting competitive bids, one agency bought two articles on the same day from a single firm, each costing less than \$25 (the limit of the

agency's exception) but together costing more than \$25. The agency was bold enough to use one voucher for both purchases—a gesture which facilitated discovery by the GAO. The GAO condemns such practices as unlawful.

R. S. 3709 by its own terms permits "open purchase or contract," by any agency and with no definite dollar-value limit, when immediate delivery is required by "the public exigency." The former phrase is usually construed, throughout the government, to mean purchase without advertising, without award to the lowest bidder, and even without solicitation of more than one bid. To the GAO, "public exigency" means "... a perplexing contingency or complication of circumstances; a sudden or unexpected occasion for action. . . ." But synonyms shift an argument rather than settle it. The GAO has held that "public exigency" does not include failure to anticipate cold weather in a northern winter (the improvident must shiver), and, less persuasively, it does not include apprehension of a price advance—a development which ordinarily can be better anticipated by a procurement officer than by the Comptroller General. (5 *Comp. Gen.* 717; 13 *Comp. Gen.* 284; 14 *Comp. Gen.* 875.)

A 3709 exigency must at all events be rather limited in time. Total war and the seller's market created by it are regarded by no one as a 3709 exigency. Since the summer of 1940 the suspending of 3709 for a vast amount of procurement has been attained by temporary legislation. Suspensions have been enacted in and for various defense appropriation measures. Eventually the First War Powers Act (December, 1941) provided, among other things, that the President may authorize "any . . . agency of the government exercising functions in connection with the prosecution of the war effort" to conduct its procurement without regard to previously existing provisions of law, but nevertheless "in accord-

ance with regulations prescribed by the President for the protection of the interests of the Government." However, the Act specified that it did not authorize the cost-plus-a-percentage-of-cost type of contract. The President has not only applied the Act's dispensation in procurement to the War and Navy Departments and the U. S. Maritime Commission but also to various civilian agencies, including four departments.⁴ The words from the Act which have been italicized above are construed very broadly; but, for some of the civilian agencies referred to, the Act's terms have been made applicable only with limitations (e.g., a limitation, in the case of the Immigration and Naturalization Service, to contracts for the feeding and care of persons in its custody). The Procurement Division of the Treasury Department was brought into the system without limitation.

According to the basic Executive Order establishing the system, the agencies to which it is applied are directed to cooperate with the Office of Production Management (since succeeded by the WPB) "... to make available for the production of war material all the industrial resources of the country." Each agency in the scheme is authorized, without regard to previously existing laws, to make contracts or amend existing or subsequent contracts and to make advance payments on contracts. The laws which may be ignored do not include the Walsh-Healey Act or certain other labor laws on procurement. But "Advertising, competitive bidding, and ... performance ... bonds or other forms of security, need not be required." Except for special limitations upon certain agencies, like that upon the Immigration and Naturalization Service, the contracts involved may cover "... all ... kinds of things and services *necessary, appropriate*

or convenient for the prosecution of the war. . . ." (The words here italicized have been very broadly construed.) Racial and religious discrimination against or by suppliers is forbidden. So also is the payment of brokerage fees by contractors to secure contracts. The fixed fee in a cost-plus-a-fixed-fee contract is limited to 7%—not 7% per annum on capital used and useful in the fulfilling of the contract, but 7% of the estimated total amount which it will cost the contractor to fulfill the contract, a fixed fee which may be many times 7% in the former sense.

Under these arrangements, the Procurement Division has extensively used negotiation for the making of definite-quantity purchases of stock and for other definite-quantity buying, notably that of the articles the procurement of which has been consolidated in the Division, for all civilian agencies, pursuant to Circular 535. It has likewise used negotiation in entering into General Schedule of Supplies contracts. Bids are frequently solicited by letter or telephone, and those obtained initially are on occasion treated as only a basis for a bargaining process, rather than being rejected outright or used as the final basis for awards. Sometimes the Division has set out to use the advertising and "competitive bidding" process and has then shifted over to negotiation. Split awards have been used on both definite- and indefinite-quantity contracts, with a portion of the business going to a bidder other than the low one.

The WPB Procurement Policy Division has advised the Procurement Division as to specific concerns which should not have civilian contracts, on the ground that these concerns should be left to the military agencies, or as to which concerns should be given contracts, on the ground that their facilities are inadequately used. The Procurement Division states that in its negotiated-contracts work it has acted upon WPB advice along these lines. The

⁴ See Executive Orders 9001, 9023, 9055, 9058, 9116, 9211, 9217, 9218, 9219, 9221, 9241, 9244, 9253, 9264, 9269, 9296.

success of such a procedure obviously depends upon the competence and integrity of the personnel who designate the firms to be used or not used.

Pursuant to the First War Powers Act, the Procurement Division has also used a type of zoning as a means of spreading contracts to concerns which it states might otherwise be under-utilized. Under this arrangement, a given commodity can be supplied on Procurement Division contracts to Federal agencies in a particular area only by concerns located in the area.

In the Procurement Division and elsewhere, the idea is recurrent with regard to the various temporary procedures lying outside 3709 that price, at present, is a consideration secondary to speed and to the facilitating of quick procurement by other buyers. For example, in his Directive No. 2 (March 4, 1942) the Chairman of the WPB instructed all agencies to which the procurement provisions of the First War Powers Act apply that they were to use negotiation for "all supply contracts relating to war procurement" and to follow the R. S. 3709 procedure only upon authorization of the WPB Director of Purchases. The Chairman went on to say that "Primary emphasis shall be upon securing delivery in the time required by the war program." Information is not at hand for a thorough appraisal of how satisfactory, in actuality, the new procedures have been. But 3709 would assuredly not be the answer to the problem. It presupposes much more automatic adjustment of the market than can exist where there are serious and widespread shortages and intense urgency.

"COMMON DENOMINATOR" PRINCIPLE IN AWARDS

Because of General Accounting Office decisions and because of custom, the government almost always seeks to eliminate or ignore all differences among bids sub-

mitted under 3709 which *prima facie* conform to specifications, except monetary differences, and to reduce the latter to a common basis. All this might be termed a "common denominator" principle. Divergence in quality is not recognized, except that the article or service offered must at least meet the minimum specifications set forth in the invitation. A bid which offers an article or service falling below that minimum must be ignored no matter how attractive a bargain the bid may be. Nor does quality markedly above the specifications permit the awarding of the contract to a bidder whose offer is above the "lowest responsible bid." The GAO allows (as noted above) no alternative to awarding the contract to the lowest responsible bidder except to reject all bids and readvertise. A government fearful of speculation and favoritism not only seeks to remove temptation from the rascally public servant and the honest one alike, but denies discretionary authority to both the foolish and the wise.

"Full specifications" are essential to the foregoing system and are required by the GAO in nearly all situations involving 3709. But with regard to the construction of an experimental airplane, even in 1934 the Comptroller General held that it was lawful to include in the advertised specifications and in the contract a provision that the contractor would be required to render performance to the best of his ability as determined by the contracting officer.

A reduction in price must be stated as a single discount rather than two or more, and is ignored unless the period within which it is available is long enough that in the circumstances there is a reasonable opportunity for benefiting by it. The minimum period is stipulated in the bid invitation. If the bidder offers a longer period, it is treated exactly as if it were the minimum. The offered price is considered on

the assumption that the discount will be used, and it ordinarily is. Failure to use it is more typically the responsibility of the finance officers of the ordering agency than the responsibility of the Treasury's disbursing officers.

ELUSIVE IDEA OF OPEN MARKET

The phrase "open market purchasing" is used in the Federal government so variously that, unless a particular context gives it meaning, it probably should not be used at all. Most commonly, it means procurement without formal advertising for bids and without a "formal" or "less formal" contract—notably, action under small-size-purchase exemptions from R. S. 3709. But in the Procurement Division of the Treasury Department there is some acceptance of the phrase "open market purchasing" as meaning all definite-quantity purchasing, irrespective of whether conducted in accordance with 3709. In most of the usages of these words, they mean a procedure or procedures which the person speaking regards as in some sense out of the ordinary, irrespective of whether he approves.

SUPPLEMENTAL CONTRACTS

In the decisions of the General Accounting Office, supplemental contracts have related both to the requirement of advertisement for competitive bids (R. S. 3709) and to the prohibition against contracting for longer than one year at a time or contracting beyond the available funds or other authorization (R. S. 3679, 3732, 3733, 3735).⁶ An agency contracts for a specified quantity of a commodity. It soon finds that its need is greater than anticipated. Convinced that expediency dictates a revision of the existing arrangements rather

than a repetition of the whole scheme of contract-letting, it proposes to act upon this judgment. Unlike a corporate business manager, the Federal administrator who changes his mind and his plans because of unforeseeable conditions or his improvidence must decide not only what new scheme will be wise but also what will be permissible.

Supplemental contracts are used, or attempts to use them are made, more frequently with respect to nonpersonal services, construction, and construction materials than with respect to the remainder of Federal procurement. "Nonpersonal services" include some—notably, stenographic reporting—which are nonpersonal only in a tenuous sense convenient in justifying administratively or before an appropriations committee the part-time and non-Civil-Service employment of personnel not readily obtainable by the more prevalent recruitment scheme. In construction, the supplier learns the distinctive situation and, in many instances, is correctly or incorrectly thought to be better able to cope with it than a newcomer would be.

More frequently than not, proposals to use supplemental buying arise in connection with options explicitly provided in the original contract, permitting its renewal at the instance of the government. Usually such an option has no provision for modification of price or other aspects of the contract. An equivalent to short-term contracts with options to renew, according to opinions of the Supreme Court, the Comptroller General, and the Attorney General,⁶ are procurement contracts extending beyond the period for which funds are available or for which there is some other authorization to contract.

⁶ To the extent that an agency is freed by statute or Executive Order from such limitations on procurement procedure, the traditional GAO doctrines on supplemental buying are of course irrelevant.

⁶ *Leiter et al. vs. United States*, 271 U. S. 204 (1926); *Goodyear Tire and Rubber Company vs. United States*, 276 U. S. 287 (1928); 9 *Comp. Gen.* 6 (1929); 21 *Ops. Att'y. Gen.* 244 (1895).

In the GAO's view, there has been a strong presumption that, where procurement is subject to 3709, supplemental contracts violate 3709, whether or not they are based upon an option to renew. "The apparent probability that the additional work may be done more conveniently or even at less expense by the original contractor, because of being engaged upon the original work, or otherwise," was condemned by Comptroller General McCarl as an irrelevancy. (5 *Comp. Gen.* 508.) He established the rule that the only way to discover whether the original contractor can do the work at less expense to the government than can any one else is to solicit new bids, on the 3709 basis. (11 *Comp. Gen.* 183.) Administrative judgment that, in a particular set of circumstances, a new contract will bring a higher price has been dismissed as conjecture, despite the contract-letting agency's orderly and substantial elaboration of the facts underlying its conclusion. (15 *Comp. Gen.* 573.) However, the GAO has repeatedly sought to make the best of both worlds by advising buying agencies that an option to extend a contract can (with or without the contractor's consent) be exercised after advertisement for new bids has evoked only higher prices. (6 *Comp. Gen.* 295; 7 *Comp. Gen.* 48; 9 *Comp. Gen.* 8; 19 *Comp. Gen.* 980.)

Neither the Supreme Court nor the Court of Claims has held that supplemental contracting without readvertising for competition is invalid per se. However, one Supreme Court decision and certain other court decisions irrelevant to this point have been cited by the GAO in support of its view. (9 *Comp. Gen.* 8.)

For several years the GAO used R. S. 3679, 3709, 3732, and 3733, singly or in combination, in attacking supplemental buying. Ultimately it came around to the viewpoint that R. S. 3709 is the legal barrier to supplemental buying. In addition,

the GAO in certain decisions not involving supplemental buying has construed these other statutory provisions in a way which would make it inconsistent to regard them as limitations on supplemental buying. (14 *Comp. Gen.* 59; 19 *Comp. Gen.* 980.) A reading of R. S. 3709 does not disclose why the interval between bid invitations must be no greater than one year. R. S. 3735 (not relied upon in the stronger statements of the GAO against supplemental buying) is much more pertinent to the problem, as it is a prohibition against supply contracts of a longer term than one year.

The General Accounting Office has held that a supplemental contract without competitive bidding is permissible if the additional work or matériel was not contemplated at the time of the original contract and, moreover, is "such an inseparable part of the work originally contracted for as to render it reasonably impossible of performance by other than the original contractor." (5 *Comp. Gen.* 508.) However, the GAO's application of this rule is typified by the following: In the construction of a District of Columbia school costing over \$1,000,000, a spring was found underground which necessitated the construction of a small subsoil drainage system, in order that the pump room (which was to be at that point) would not be damaged. The municipal architect's office regarded \$1,035 as a fair charge for the job, and the District government had the original contractor do it for that. The Comptroller General did not remark that there had been no showing that no other contractor would have sufficed. Instead, he took the position that, *even though the pump room would have been damaged*, the original contractor admittedly could have finished his job without there being a drainage system constructed and hence there should have been an invitation for competitive bids. (14 *Comp. Gen.* 466.)

On the other hand, there have been supplemental contracts which amounted to (at the least) very poor administration and hence were deserving of the criticism made of them by the Comptroller General (14 *Comp. Gen.* 59; 15 *Comp. Gen.* 954), even if it is arguable whether blameworthy administration can most appropriately be remedied by a General Accounting Office.

UNDULY RESTRICTIVE SPECIFICATIONS

By far the most frequent source of conflict between procurement personnel and the General Accounting Office concerning 3709 is specifications. (1) The using agency, in an effort at getting a particular make or brand of article preferred by it, devises specifications to which only the preferred make or brand conforms. Or, to the same effect, narrow specifications limit the bidding to the desired make, plus other makes which are so superior that they are sure to be offered only at higher prices. The GAO is less acquiescent in this game than is the Civil Service Commission in the analogous process whereby, pursuant to ingeniously devised job qualifications, an individual is sufficiently freed from competition that he can be appointed. (2) To bar needless "luxury" and to promote its conception of competition, the GAO has strongly insisted that specifications not be above the minimum need of the activity concerned, and that all bidders able to meet that minimum be considered on an equal footing, selection among them being based upon price alone. In the first sort of situation, the buying agency's position in these conflicts has not been invariably defensible; but the GAO's interposing of its own judgment as to what quality is adequate to the purpose can result, and frequently has resulted, in an unfortunate degree of interference in procurement.⁷ This is hardly surprising

in view of the fact that the GAO is not composed of procurement personnel.

Truck and passenger automobiles have been the most frequent subject of disagreement between the GAO and the using agencies as to specifications. Repeatedly the GAO has condemned specifications—such as a particular manner of mounting the spare tire—obviously designed to limit the bidding to one make of automobile. Such a limitation is not necessarily adopted for a valid reason. On the other hand, the GAO doctrines on what sort of passenger automobile meets the government's minimum needs may be summed up by saying that, apart from bantams, any automobile is adequate in almost any conceivable circumstances if the dealer regards it as, in some sense, a complete specimen. Thus safety glass was held equally unpermissible in Washington and in localities where gravel is kicked up by passing cars. The ban on such "trinkets" (the word is from a decision by the Comptroller General) has necessarily excluded from competition the cars having them (unless such cars be offered at prices as low as the prices of trinketless cars). Competition outside the government is seldom a rivalry limited to price. In the name of keeping competition wide, the GAO has substituted one set of suppliers for another.

Occasionally a contract-letting agency has, on its own initiative, required that a construction contract or the like include an agreement that the contractor will pay stipulated minimum wages or meet other minimum labor standards. Such requirements, so long as not made pursuant to the Davis-Bacon Act or similar procurement legislation, usually are condemned by the GAO as "unduly restrictive specifications." This view is held irrespective of whether the requirements are devised by the procuring agency or whether they are a contractual implementation of a law,

⁷ See 6 *Comp. Gen.* 838; 9 *Comp. Gen.* 519; 15 *Comp. Gen.* 974, 1085, 1103; 16 *Comp. Gen.* 178, 207, 354, 448.

such as the National Labor Relations Act, not enacted specifically with reference to procurement. (17 *Comp. Gen.* 37; 18 *Comp. Gen.* 285; 20 *Comp. Gen.* 14, 18, 24.) Even a requirement that monthly statistical reports be submitted on the number of employees, aggregate pay roll, aggregate man hours, and expenditure for materials was held to be restrictive of competition and hence violative of 3709. The GAO has insisted that, in purchasing coal, the government must not impose as a specification a requirement that prices be no lower than the minima fixed under the Bituminous Coal Act of 1937. The GAO has demanded that the government become a party to a violation of its own orders, by accepting

offers of coal at prices below the legal minima, if such prices be offered. (19 *Comp. Gen.* 433; 20 *Comp. Gen.* 259.)^a In this connection it is interesting to remember that the General Accounting Office regards its function as that of insuring that executive agencies obey the will of Congress.

^a See also a converse decision by the GAO, insisting upon the sale of Federally owned scrap metal at a price in excess of the *maximum* fixed by the Office of Price Administration and Civilian Supply if such a price be obtainable. (21 *Comp. Gen.* 316.) As the whole occurrence preceded the enactment of the Emergency Price Control Act of 1942, the OPACS price determination should perhaps be regarded as advice rather than as an order having the force of law. But Comptroller General Warren discussed the price determination as if it were the latter sort.

THE LINGERING INFLUENCE OF MEDIEVAL PRACTICES

RAYMOND DE ROOVER

IN THE Middle Ages the use of a bank account was more common than one would expect. In most medieval trading centers, the money-changers did not confine their activity to the petty exchange of coins but had entered the field of commercial banking.

Banks of deposit, managed by local money-changers, existed in Venice, Florence, Genoa, Barcelona, Bruges, and probably in Antwerp and Paris. After 1400, there was a municipal bank in Barcelona, but the private banks continued to exist beside the new institution, and attempts to drive them out of business were unsuccessful. In Valencia also, a municipal bank was created but it failed to prosper and was dissolved after a few years.

There is no evidence of the existence of commercial banks in London. Probably it was not until the reign of Elizabeth that the London goldsmiths began to accept

deposits from merchants and other persons. Why banking developed so late in England can easily be explained by the economic backwardness of that country prior to the sixteenth century as compared with Italy, the Low Countries, and even Spain.

Medieval banking practice differed from modern methods in some important respects. One of the most striking differences was the absence of checks. As Professor Usher, of Harvard University, has pointed out in his studies on medieval banking, checks were replaced by transfer orders given by word of mouth.¹ It seems clear from the available evidence that most local payments between merchants were made by "assignment in bank," that is to say, by means of a credit transfer on the

¹ Abbott Payson Usher, "The Origins of Banking: The Primitive Bank of Deposit, 1200-1600," *The Economic History Review*, IV (1934), 399-428.

books of a bank instead of in specie. A great number of payments were thus made by "writings only" and without resorting to the time-consuming and tedious process of counting coin.

As a result of the use of oral orders in lieu of written checks, banking practices and accounting procedure were quite different from what they are today. Making payments by assignment involved going in person to the bank. The banker wrote the transfer in his journal at the customer's dictation, so to speak. In principle, the presence of both the assignor and the assignee was required by law, but this rule was often disregarded in practice. Bank transfers were frequently made on the strength of an order given by the debtor alone, without the creditor being present. According to a case decided by the Bruges municipal court, payment by book transfer was not complete, however, unless the creditor declared himself satisfied with this mode of settlement.³ The Florentine statutes contained a similar rule and also required the presence and the consent of the creditor (*presente et volente creditore*).⁴

In order to pay by transfer, it was not necessary for the assignor and the assignee to have their bank accounts in the same bank. Since all the local banks were in account with each other, it was easy enough to transfer credit from the account of Mr. A, customer of banker X, to the account of Mr. B, customer of banker Y. An example of a transaction of this sort is found as early as 1200 in the records of a Genoese notary.⁵ The account books of

two Bruges money-changers of the fourteenth century also contain many examples which prove the existence of clearing arrangements among the banks.⁶

As each order of transfer was given orally, the entry made by the banker in his journal was the only evidence of the transaction. It is, therefore, not surprising that medieval regulations on the matter were very strict. The Florentine statutes of the money-changers' guild prescribed that the members of the guild had to make the necessary entries in their books in the presence of the customer and before he left the premises.⁶

In Italy, the journal of a banker was generally considered as a public and notarial record, and, consequently, the contents could not be contested in court.⁷ In the Genoese banks, the clerk who kept the journal had to be an imperial notary, duly licensed after taking the customary oath.

The method of making payments by bank transfer is described by Luca Paciolo in Chapter Twenty-four of his famous treatise on bookkeeping. In this chapter, Paciolo tells his reader how a merchant should keep his accounts straight when dealing with a bank. Paciolo's language is sometimes so condensed that it becomes obscure. As a result, the passage referring to payments by transfer and the authenticity of bank records has been frequently misunderstood. None of the English or German translations of Paciolo's treatise renders the meaning of this passage with a satisfactory degree of accuracy.

³ Heinrich Brünner, "Beiträge zur Geschichte und Dogmatik der Werthpapiere, I. Brügger Schöffensprüche zur Geschichte des Wechselrechts im fünfzehnten Jahrhundert," *Zeitschrift für das gesamte Handelsrecht*, XXII (1877), 30-32.

⁴ Gustav Lastig, "Beiträge zur Geschichte des Handelsrechts," *Zeitschrift für das gesamte Handelsrecht*, XXIII (1878), 152.

⁵ Robert L. Reynolds, "A Business Affair in Genoa in the Year 1200: Banking, Bookkeeping, a Broker and a Lawsuit," *Studi di storia e diritto in onore di Enrico Besta* (Milan, 1938), II, 167-181.

⁶ For evidence, see Lewis A. Carman, "Researches of Raymond de Roover in Flemish Accounting of the Fourteenth Century," *The Journal of Accountancy*, LX (1935), 117-118, 122.

⁷ Alberto Tofani, *Alcune ricerche storiche sull'ufficio e la professione di ragioniere a Firenze al tempo della Repubblica* (Florence, 1910), p. 43.

⁸ Usher, *op. cit.*, p. 410, n. 3; Heinrich Sieveking, *Genueser Finanzwesen mit besonderer Berücksichtigung der Casa di San Giorgio*, II. *Die Casa di San Giorgio* (Freiburg in Breisgau, 1899), p. 47 [331].

Paciolo's Italian text is as follows:

"Hora per li banchi de scripta di quali se ne trovan oggidi in Vinetia, in Bruggia, in Anversa, e Barcelona e certi altri luoghi famosi e traficanti, ci convien saper con loro libri scontrare con grandissima diligentia. E però è da notar che con lo banco te poi comunamente impaciare da te, ponendovi denari per più tua sigurezza; o vero per modo de deposito ala giornata poter con quelsi far tuoi pagamenti chiari a Piero, Giovanni e Martino, perchè la ditta del banco è comme pubblico istrumento de notaro, perchè son per li dominii alcigurati."

The following is the closest translation which I have been able to make; it is not quite literal, but it gives as accurately as possible the meaning of Paciolo's text:

"With regard to the transfer banks which exist nowadays in Venice, Bruges, Antwerp, Barcelona, and other renowned trading centers, you should know that great care is needed in order to keep your accounts in agreement with those of the banks. And, therefore, you should bear in mind that it is common to deal with a bank and put money in it, either for greater safety, or under the form of a deposit, repayable any day, so that you can make your payments therefrom to Peter, John or Martin, because the 'assignment in bank' or bank transfer is as safe as the public instrument of a notary, since both are considered as authentic by the government authorities [and the Courts]. If you thus put money in a bank, you shall debit it, stating the name of the partners or of the banking firm, [*compagnia del banco*] and credit Cash, making the following entry in the journal. . . ."

Crivelli, the author of an English translation of Paciolo's treatise, misinterprets the meaning of *ditta del banco* and translates it as "banking firm" instead of "bank transfer." He also speaks of "the security of the Dominion," which does not make sense.⁹ The translation of Geijsbeek is somewhat better, but it is still far from accurate. He translates the crucial passage

as follows: "... for a bank draft is like a public notarial instrument, because they are controlled by the state."¹⁰ The phrase "bank draft" is unfortunate because it suggests the use of a written document, whereas we know from other sources that transfer orders were given by word of mouth and not in written form. The only written record was the entry in the journal of the bank.

That this interpretation is correct further appears from another passage in Chapter Twenty-four of Paciolo's treatise. In this passage, the author advises his reader to ask the bank for a receipt whenever a deposit is made, but adds immediately: "Such receipts are not customary, because, as said before, the books of a bank are always public and authentic records." This passage, it seems to me, dispels all doubt about the informal nature of medieval banking practices and further explains why so much importance was attached to the journal, since it was the only record of otherwise oral agreements.

Italian municipal and guild statutes extended the rules, which at first applied to bank books only, to all mercantile account books. The statutes required that the journal be kept in strict chronological order, without blanks, without erasures, and without marginal notes.¹¹ In the extension columns, the use of Arabic figures was forbidden, because it was thought that they could be more easily falsified than Roman numerals. To tear leaves from the journal was considered a serious offense and entailed severe penalties.¹² In Venice, a money-changer who was caught perpetrating such a fraud was excluded forever from the practice of his profession.¹³

These medieval regulations have left

⁹ Luca Paciolo, *Summa de Arithmetica, Geometria, Proportionibus et Proportionalitate* (Brescia, 1494; Toscanano, 2d ed., 1523), *Distinctio IX, Tractatus XI*, chap. xxiv. Cf. John B. Geijsbeek, *Ancient Double-entry Book-keeping* (Denver, Colo., 1914), p. 62.

¹⁰ Pietro Crivelli, *An Original Translation of the Treatise on Double-entry Book-keeping by Frater Lucas Pacioli* (London, 1924), p. 71.

¹¹ *Op. cit.*, p. 63.

¹² Usher, *op. cit.*, p. 411.

¹³ Giulio Gandi, *Le corporazioni dell'antica Firenze* (Florence, 1928), p. 97.

¹⁴ Elia Lattes, *La libertà delle banche a Venezia dal secolo XIII al XVII* (Milan, 1869), pp. 29-30.

a lasting imprint on the commercial law of those European countries whose codes are derived from the *Code Napoléon* and the French *Ordonnance du Commerce* of 1673. In those countries it is still mandatory to keep the journal strictly in chronological order and without any suspicious erasures or blanks. Accountants and legal writers alike have often been puzzled by these requirements and have asked themselves why the law is so much concerned with the journal and so little with the ledger, which is after all the key-book in any well-conceived system of accounting. A knowledge of medieval business practice would have solved the mystery. The explanation is simply that the law did not keep pace with the march of time.

The rules imposed by the commercial codes of those European countries influenced by French law have proven to be badly adapted to the requirements of large-scale business organizations. In practice, the law is disregarded with the connivance of the courts that have sanctioned the use of special journals with multiple columns. However, some respect is still paid to the letter, if not to the spirit, of the law. Usually totals at the foot of the columns in the special journals are not posted directly to the general ledger, as is customary in this country. Instead, these data are tabulated and summarized in some kind of a general journal called *journal centralisateur*, from which they are posted to the general ledger. The purpose of having a *journal centralisateur* is simply to comply with the law, although the *journal centralisateur* has ceased to be a book of original entry, as the law really intended. The *journal centralisateur* is still kept in chronological order, but the entries in it are made once a month instead of every day.

French law does not allow the use of loose-leaf books but requires the journal to be a bound volume. As a matter of fact, the number of pages has to be stated on the first and on the last page of the journal. Each new journal is taken to the commercial court, where these two statements concerning the number of pages are authenticated by one of the judges. In addition, every folio in the new journal is stamped with the initials of this judge. According to Paciolo, a similar practice existed in medieval Perugia.¹⁴

Such regulations are difficult to apply when accounting machines are doing the work which was formerly done with the pen. The reason is that the adoption of mechanized processes necessarily involves the use of loose leaves which can be inserted in the machines. In order to comply with the law, business firms, even large concerns, sometimes have the journal—that is, the *journal centralisateur*—recopied by hand in leather-bound volumes.

A firm with which the writer was connected before he came to America employed for this purpose an old man who was an expert in penmanship. The firm in question, the largest shipping agency in Antwerp, had more than four hundred office workers and acted as agent for Belgian, English, and German shipowners. The old man was busy all day recopying typewritten sheets in his beautiful handwriting. Annually the leather-bound volumes on which he had labored all year were sent down to the vault; it is doubtful whether anyone ever glanced at them again, but due respect had been paid to an antiquated law which can be traced back to Napoleon, to Louis XIV, and to the Italian republics of Paciolo's time.

¹⁴ Luca Paciolo, *op. cit.*, chap. vii; Geijsbeek, *op. cit.* p. 41; Crivelli, *op. cit.*, pp. 17-18.

OVERHEAD COSTS IN PUBLIC WELFARE

C. RUFUS ROREM

THERE HAS been considerable public criticism of what appeared to be unduly high costs for the administration of public assistance and relief. Administration expenses have generally been contrasted by legislators and the public with the cash payments made directly to public assistance beneficiaries.

Grouping and contrasting expenditures for "assistance," on the one hand, and "administration," on the other, have encouraged the assumption that costs of administration represent merely the cost of distributing the money expended for assistance. Persons familiar with public assistance operations realize that other functions are also performed. They realize further that the cost incurred for investigating cases which never receive relief may be more in the interests of the taxpayer than haphazard and inappropriate disbursements to individuals not entitled to benefits under the public assistance program.

Many other types of expense which may reduce total cost for assistance are concealed under the general heading of administrative expenses. For example, agencies pay money for the administration of medical service, for the cost of distributing surplus commodities, or for determining eligibility of applicants for employment by state or Federal agencies.

To deal with the foregoing problem, the American Public Welfare Association appointed a special Committee on Public Welfare Accounting several years ago. This Committee has worked with official representatives of the Social Security Board to prepare a classification of public assistance costs which would show the purposes served by expenditures of the taxpayers' funds and the reasons why these expenditures were necessary. The Committee rec-

ommended the discontinuance of lump-sum figures for administration and for public assistance, respectively, the substitution of a statement of the actual costs incurred for each major purpose served by the expenditures for public assistance, and the imputation of each group of costs to the responsibilities imposed on the welfare agency by the law under which its funds were obtained. There is considerable difference in the organizational structure of welfare agencies, the difference arising from their varying purposes and functions. Nevertheless the Committee believes that its classification by purpose is so constructed that it reflects in a general way the organization of most welfare agencies. The "standard classification of public assistance costs" recommended by the Committee is shown below:

- 100 General administration
- 200 Maintenance and care
 - 210 Home maintenance
 - 220 Foster and institutional care
 - 221 Foster-home care
 - 222 Institutional care
 - 230 Medical care
 - 231 Clinical, home, and other noninstitutional care
 - 232 Hospitalization and other institutional care
 - 240 Burial assistance
 - 250 Transportation
- 300 Determination of eligibility for maintenance and care
 - 310 Home maintenance
 - 311 Initial eligibility
 - 312 Continuing eligibility
 - 320 Foster and institutional care
 - 321 Initial eligibility
 - 322 Continuing eligibility
 - 330 Medical care
 - 331 Initial eligibility
 - 332 Continuing eligibility
 - 340 Burial assistance
 - 350 Transportation
 - 360 Federal agencies

- 400 Disbursement and distribution of maintenance care
 - 410 Home maintenance
 - 420 Foster and institutional care
 - 430 Medical care
 - 440 Burial assistance
 - 450 Transportation
 - 460 Surplus commodities
- 500 Recovery of maintenance and care
 - 510 Home maintenance
 - 520 Foster and institutional care
 - 530 Medical care
 - 540 Burial assistance
 - 550 Transportation
- 600 Special services
 - 610 Social investigation for other agencies
 - 620 Inspection, regulation, and licensing of foster homes and institutions
 - 630 Health protection
 - 640 Counseling on individual and family problems
 - 650 Vocational guidance and training
 - 660 Other
- 700 Operation of work projects
 - 710 Operation of agency work projects
 - 720 Contributions to work projects of other agencies

The actual expenses of a public welfare agency, originally classified by object of expenditure, may be regrouped in terms of their purposes, as illustrated in Exhibit A. Such a reclassification involves a periodic analysis of the ledger accounts, but may of course, actually be incorporated into the current records, provided a cost system has been previously established. Schedule 1 illustrates the detailed underlying account No. 200, entitled "Maintenance and Care," which for most public welfare agencies is the primary expense of public assistance.

It is common to assume that public assistance (for example, for the aged) provides only financial assistance to persons in their homes, that is, "home maintenance." When costs are presented in the fashion represented by Exhibit A and Schedule 1 it becomes evident that old-age-assistance appropriations may also

(Illustrative only)

EXHIBIT A.—PUBLIC ASSISTANCE: SUMMARY OF EXPENDITURES FROM EACH APPROPRIATION, BY PURPOSE

[illegible]

(Illustrative only)

SCHEDULE 1.—PUBLIC ASSISTANCE: CURRENT OPERATING EXPENSE FOR MAINTENANCE AND CARE,
BY TYPE OF CARE

Agency.....	Type of care	Total cost.....		Cost per case (for quarter)	
		Current period	Change over previous period (±)	Current period	Change over previous period (±)
		(1)	(2)	(3)	(4)
200 Maintenance and care—total.....		\$129,872	+\$5,300		
210 Home maintenance.....		\$115,350	+\$5,350		
211 Aged.....		\$ 42,000	+\$7,000	\$ 60.00	+\$2.00
212 Blind.....		3,750	-50	75.00	-1.50
213 Children.....		31,500	+1,500	105.00	+ 3.00
214 General.....		38,100	-3,100	76.20	-2.00
220 Foster and institutional care.....		\$ 9,000	-\$200		
221 Foster care.....		\$ 6,000	+\$1,000	60.00	+2.00
222 Institutional care.....		3,000	-1,200	40.00	-1.00
230 Medical care.....		\$ 4,022	+\$400		
231 Clinical, home, and other noninstitutional care.....		\$ 2,522	+\$500	84.07	+5.00
232 Hospitalization and other institutional care.....		1,500	-100	150.00	+10.00
240 Burial assistance.....		\$ 1,000	-\$200	100.00
250 Transportation.....		\$500	-\$50	20.00	+2.00

cover institutional care, medical care, or burial service.

Exhibit A reveals the total amount expended for similar types of care under different appropriations. Expenditures for medical care, for example, under individual appropriations may seem relatively unimportant, but in total they may become very large. Attention is directed by such a report to the question of whether medical care should be provided under a special program, or as part of several programs concerned chiefly with financial assistance to persons in their homes.

The standard classification of public assistance costs is a joint recommendation of the American Public Welfare Association and the Social Security Board. Official participation by staff members of the Social Security Board made it possible to incorporate the thinking and recommendations of the experts concerned with

national phases of public welfare administration and accounting. In turn the judgments of the state and local welfare administrators guided the committees in making recommendations which would be practicable for state and local application. Appointees of the American Institute of Accountants gave criticism and suggestions which have assured compliance with sound accounting theory and practice.

In the preface to the report, the author of this article stated certain assumptions which had been taken into consideration, for it was recognized that the committee had attempted only a part of the task of reaching perfection in public welfare accounting and that there were many equally important results yet to be achieved. These assumptions of the Committee were:

Emphasis upon administrative efficiency must not minimize the importance of legal accountability for the use of appropriated

public funds. Public welfare agencies are creatures of, and ultimately responsible to, the people as represented in legislative bodies. At any given time the intent and instructions of legislative bodies must guide the administration of public funds.

It may become desirable, or even necessary, for accounting classifications to be incorporated into the administrative regulations of governmental units which provide public welfare services or their financial support. This possibility makes it important that careful consideration be given to the recommendations of this and future committees, in order that accounting policies and practice may develop rather than hinder the effectiveness of welfare administration.

Accounting classifications for public welfare services should be consistent with the terminology, definitions, and procedures used or contemplated by other government agencies. Public welfare is a part of, not apart from, the general science and administration of government. In this report the Committee has attempted to recognize and incorporate the best thinking and experience in the field of public finance and administration.

Accounting classification must recognize the element of time in the allocation of service and responsibility. It makes a great difference, both legally and administratively, whether a service has been, or is to be, rendered, and whether financial resources have been, or are to be, expended or received.

In the allocation of costs to specific public welfare activities the element of judgment is a necessary and continuing factor. This makes it important for each public welfare administrator to develop and maintain an active interest in the records and reports of his own agency. Arithmetic cannot be substituted for experience and common sense, even though many judgments may be based upon numerical counts and tabulation.

Accounting records are not the only important data used in the administration of public welfare. They cannot measure the tact of a caseworker, the heartache of a dependent child, or even the adequacy of compensation during a period of unemployment. Moreover, the quantitative data of accounts must be supplemented by non-financial records and statistics of welfare services. The Committee realizes the limitations of its work and recommendations, and hopes that this report will help to improve the present standards of accounting in this field.

The report of the Committee contains two important appendixes to guide the finance officers of welfare agencies and auditors, who may be assigned from time to time by the Federal Social Security Board, in the installation procedures for applying the uniform standard classification of public assistance costs. They are entitled "Methods of Allocating Costs to Standard Cost Classes" and "Check List of Public Assistance Activities by Cost Classes."

THE ACCOUNTING EXCHANGE

A. C. LITTLETON

According to an old adage, "Competition is the life of trade." To fit the present situation this might be paraphrased to read: "Exchange of ideas provides a stimulus to improvement of educational processes." It is hoped that material dealing with the broader aspects of accounting education may be forthcoming for use in this department. Opinions might be exchanged on a variety of matters in connection with educational policy, curriculum alterations, course content, and the like. The usual type of short contribution on teaching methods and general accounting topics will continue to be welcomed.

Comparing views and asking questions on a man-to-man basis has always been an unplanned but valued feature of the annual meetings. Writing out these ideas and questions cannot be a real substitute for personal contacts, but as a makeshift we might try this medium for the duration. "When the lights go on again all over the world"—we can go back to the old way.

In the meantime, "... it seems to me imperative to use these months of war and educational change as a time for vigorous exploration. Scholars and teachers, philosophers and administrators, professors and schoolmasters, should unite in a thorough-going inquiry." These words of James Bryant Conant, president of Harvard University, could well be echoed by accounting teachers even if they are in the midst of new and unfamiliar duties.

"VIGOROUS EXPLORATION." Below are a number of questions that come to mind. Perhaps some of them may strike a spark. A few are clearly such that professional accountants might be expected to have opinions about them. Since there may occasionally be good reasons for not acknowledging authorship of critical ideas,

a nom de plume will be acceptable in this case, provided the department editor is informed as to the real person.

Has a proper college education accelerated the growth of staff men into good auditors?

In what respects has formal education been overemphasized for the preparation of professional accountants? Underemphasized?

What type of educational preparation for the profession has proved the most satisfactory?

Is the present wide variety of educational programs in accountancy necessary?

What could be considered an ideal preparation for a professional career in accountancy?

In what respects are the accounting curricula of today closer to an ideal preparation than those of twenty-five or thirty years ago?

In what ways are formal education and practical accounting experience complementary?

Can undirected study supplement accounting office work in a satisfactory manner? Can simulated practice be a satisfactory supplement to teacher-directed study in school?

Is professional education effective if accounting is learned by practice in an office and non-accounting matters learned by study in school?

LIBERAL EDUCATION. There are very few people who would favor a highly specialized education in accountancy to the exclusion of all general subjects. In some cases necessity rather than choice produces that unfortunate result. To students who follow this course it may be said that the deficiencies in general education can be

made good in surprising amount later on if only the will to do so is strong, for the ways of doing it are many.

Usually discussions of liberal education turn toward one of two propositions: (a) The content of a liberal education should precede the content of technical professional education; and (b) Courses of each type of educational content should be intermingled throughout the educational program. One of the many issues that concern both professional accountants and and accounting teachers is the amount of liberal education that is desirable in preparation for a career in public accounting. Discussion of that subject has by no means been exhausted. Probably it is one of those topics which could with benefit be "vigorously explored" at this time.

To afford a hilltop view of the objectives of education—thus perhaps to stimulate thinking about the liberal portion of accounting education—the following summary is offered as an experienced educator's views of the meaning of "well-educated."

"1. An educated man is one who is trained to use the tools of human intercourse with readiness, precision and accuracy. We mean, especially, language and the rudiments of number.

"2. An educated man must be able to study and to think without guidance from others. He must be—to some extent—a thinker, not a mere imitator.

"3. An educated man must have a sufficient knowledge of nature to understand the main processes upon which human life and happiness depend.

"4. An educated man knows enough of history to enable him to understand the main achievements of man.

"5. An educated man is acquainted with the major resources for intellectual and esthetic enjoyment. He knows nature, literature, music and the other arts sufficiently to choose superior to inferior enjoyments.

"6. An educated man is marked by his interests as well as by his trained abilities. His attention is habitually attracted by significant rather than trivial objects, events, pursuits and enjoyments.

"7. An educated man must have not only this

general culture, but also training for a specific occupation. Focalized activity that is directed toward some sort of efficiency has to be included.

"8. An educated man must have toward his fellows the habitual attitudes that are commonly called ethical—such attitudes as honor and honesty, helpfulness and good-will and co-operation.

"9. An educated man must have loyalties to at least some of the important organizations and institutions of society, such as one's family, one's country, one's church.

"10. If there is an inclusive meaning in life, the sort of education that I have been outlining should include some apprehension of, and feeling for, the divine; the ideally educated man will reverence God, and know how to worship."—George A. Coe, *What Ails Youth?*

These should be stimulating ideas for any teacher to think about but especially for accounting teachers. If a four-year program is divided into sixty hours for technical accounting work and closely allied subjects and sixty hours that are available for general liberal education, how should the twenty or twenty-five courses making up the latter be apportioned among the ten objectives outlined above? And why? What, if anything, can be done about the areas that might have to be omitted? Can all of the ten objectives be successfully carried out by formal classroom exercises?

PRACTITIONERS' RESPONSIBILITIES. Public accountants get some of their most important supplies from educational institutions. Schools are the source of supply; practitioners are the customers. The producer usually does not manufacture to order, but he does take careful note of the goods in demand and those that are not. The clues to production thus come indirectly from the customers. Few customers are able to specify product characteristics; fewer still would be aware of production difficulties. The customer usually votes his preferences by making choices.

Public accountants, as customers of the colleges supplying graduates, are much like other customers: They know what they like; They are not sure just why;

They hesitate to make suggestions for improvement. Manufacturers often try to learn to serve better by stirring customers to analyze the basis of their choices. Accounting teachers could do likewise.

On the other hand, practitioners have a direct and vital interest in the matter. They could with benefit take the initiative in exploring their own views about the characteristics desired of young men entering the profession. They could safely leave to professional teachers the task of deciding the means of helping students to acquire those characteristics. Professional accountants have often said they like a new man to have a pleasing personality, to be able to use the English language with reasonable skill, and to have a capacity for dealing effectively with masses of figures. Are there no other suggestions? If the profession will be satisfied with these characteristics alone teachers will know how to respond. But just now teachers doubt that these are enough; and they are not entirely confident that their own ideas of what else should be in the list of objectives are as useful as they might be.

WORDS AND FIGURES. When professional accountants say that college graduates coming into their employ are commonly weak in English, they do not mean a deficiency in the ability to appreciate good literature. And when they say that the graduates are weak in mathematics, they do not mean the calculus or the method of least squares. They merely feel that it is a distinct advantage in the profession to be able to express one's self clearly in the mother tongue and to be able to deal with figures arithmetically.

If an accountant expresses a preference for graduates from a liberal arts program, may it not be that he believes graduates from a commerce program have often neglected these two fundamentals in studying other things?

Perhaps the colleges of commerce have placed too much faith in a few special

courses such as freshman rhetoric and business letter writing. It is doubtful that these are enough to give one a real facility in the use of language. More such courses in the curriculum would help, but the accounting major gets too little opportunity to practice the use of the English language outside his rhetoric classes.

In contrast, a liberal arts course requires of the student a great deal of reading. Much of it puts him in contact with good writing. Foreign language is also required. One of the advantages of work in a foreign language is the enforced contact with the mechanics of language structure. In addition, in many courses frequent papers and reports are expected which give further practice in the use of language.

This raises some questions about the usual commerce curriculum for an accounting major. Is the major in accountancy doing so much work in marshaling quantitative data that too little time is left to practice expressing thoughts verbally? May it not be that CPA laws and CPA examiners through concentration on "factual" data—figure problems—have set a pattern of thought tending to neglect verbal problems? Is judging the answers to the essay type of examination question, if used in moderation, actually difficult for a mature and experienced accountant?

As for weakness in arithmetic, do the graduates of colleges of commerce, even after a good deal of figure work in accounting courses, go into offices with any real facility in handling figures? Do courses in analytical geometry, college algebra, trigonometry, calculus, actuarial mathematics, give the student a real facility in dealing with figures, or do they only give practice in certain kinds of thought processes which are seldom directly useful in working professional accounting problems?

Perhaps higher mathematics should be studied for its disciplinary value rather than as knowledge for use. It does have the effect of reducing the number of those who

go on toward graduation. But so, too, do the accounting courses. There is another question: How much of the service of colleges lies in sifting and screening for the accounting profession those with capacity to learn quickly and ability to grow in powers of intensive thinking, and how much lies in transmitting knowledge and skill? Any takers on that question?

No doubt it is mere tradition that arithmetic is usually considered as "below the college level." If work in economic principles, sociology, and the like can be adapted to high school use, it seems equally reasonable to assume that "figure techniques" could be developed into a useful and disciplinary course on the college level. No doubt, college teachers of statistics, engineering, and finance, as well as teachers of accounting, have often wished for their students a better foundation in arithmetical processes. Some bold spirit may some day startle us all by developing a graded sequence in the study of "Computations." Then we will be astonished to discover how well the basic processes of computation blend into the commercial use of figures, the statistical use of figures, and thence onward into the abstractions and short cuts of higher mathematics.

Life and labor in this day put a premium on ability to deal with words and figures. Colleges, no less than the lower schools, are charged with the duty of trying to develop these powers, among others, to the limits of the students' capacity. We have no false modesty about giving college students elementary instruction in the use of words. Why are we so diffident about helping them to learn to use figures?

The student heading toward a career in accounting needs thorough training in both words and figures—up to a certain point. The short cuts of higher mathematics are like poetic language—designed for special uses above the plane of ordinary use. The scientist, the engineer, the orator, the preacher—these have need for ad-

vanced training in words and figures. The accountant's work does not ascend to that level; his education, therefore, need not extend so far.

Surely a number of people have ideas about "arithmetic on the college level"; surely accountants have ideas about "technical skills in handling figures." Add pen and ink and mix.

FUND STATEMENT TERMINOLOGY

All will agree that the application-of-funds statement has not come into practical use as it deserves. Balance-sheet data are a mixture of the results of financial transactions and operating transactions. Data in the income statement reflect operating activities. In a sense, therefore, the latter statement "interprets" the balance sheet—helps the reader unscramble the mixture. The funds statement, if logically organized toward a definite purpose and clearly stated in informative terminology, could become a very useful further aid in unscrambling the balance sheet.

Below, CLIFFORD N. SELLIE offers some interesting suggestions as to terminology. Someone might well follow up by exploring the "philosophy" of the statement. Is it true that its greatest fault lies in its failure to come to a definite conclusion? The other statements do not have that weakness.

Mr. Sellie writes as follows:

The limited extent to which fund statements are used is inconsistent with their value as a means of analyzing the financial operations of a firm or an industrial group. This neglect to use fund statements to a wider extent is all the more surprising, because the trend in accounting has been away from an effort to portray present values in favor of showing original costs.

As a result of this trend, the general standard today is that the balance sheet should show where the funds of the firm have been invested, and who (or what) has

supplied the funds. With this as a basis, few would maintain that the balance sheet on a given date shows the value of the assets or the value of the owners' equity. Likewise, today's model profit and loss statement shows the revenues and expenses of the past period's operations, with expenses measured in terms of costs. Since the costs of the assets surrendered or expired (that is, the amounts shown as expenses) do not necessarily measure the value of those assets at the time or during the period in which they are used, the profit and loss statement also does not necessarily reflect the profitability or unprofitability of operations during the period. It might indeed be said that now, because of the stress on costs, the chief function of the balance sheet is to reflect the investments of funds on the asset side and the sources of funds on the equity side, and the chief function of the profit and loss statement is to show sources of funds on the revenue side and applications of funds (current and past) on the expense side.

It seems strange then, in view of what appears to be the present function of the two most familiar financial statements, that accountants should neglect that statement which would show the total movement of funds, movements which are only reflected in the balance sheet and shown only in part by the profit and loss statement. It is, of course, not contended that fund statements are not also desirable or are not applicable in case accounting statements are prepared to reflect chiefly values rather than costs. A picture of the source and application of funds is useful under either standard. It would be important, to both stockholders and management, to know how the firm has invested its funds during the period even though the accounting stress were on what the assets are worth instead of what they cost. It would be equally important to know how the firm's funds were obtained during the

period even though the main emphasis were on the present value of the equities. But it is easier to prepare a fund statement—since there are fewer “pure-bookkeeping” entries to reverse—and it seems more logical to demand a fund statement, when emphasis is placed on costs; for the resulting effect of this emphasis is to place the balance sheet and the profit and loss statement on what might be called a “fund” basis.

Perhaps an explanation of the common neglect to utilize the fund statement, regardless of whether value or cost (or a combination of the two) is used as an accounting guide, may be found in the customary form of the fund statement itself. This form seems to have been designed to confuse the uninitiated and to hide facts from the expert. The ordinary statement of “Source and Application of Funds” contains conflicting titles such as “Funds provided by Net Profit” and “Funds provided by Depreciation.” These titles serve only to frustrate the teacher who has done his best to convince his students that “profit” is not synonymous with “money,” that “depreciation” is intangible, represented by book entries that simply refuse to provide any funds whatsoever.

There is no logical excuse for using such titles, except lethargy. Presumably, the term “Funds provided by Depreciation” is an anachronism retained from the good old days when depreciation was a convenient mystery and income taxes an evil that could be avoided. That title, however, has often been replaced by less inaccurate but equally confusing ones such as “Depreciation added back.” This, at least, is an encouraging sign: for where there is change, there is hope for improvement. But the title “Funds provided by Net Profit,” which has not been changed, is equally inappropriate. It is time that the improvements which have taken place in other phases of accounting should take place in the form of the fund statement

also. With that in mind, the following combinations (beginning with the least satisfactory) are suggested as substitutes for the above titles:

1. Funds provided by: "Net Profit before Depreciation."

This is suggested as an improvement, in that an explanation of only one confusing title is required.

2. Funds provided by: "Excess of Revenue over Current Out-of-Pocket Costs."

This is an improvement, in that it is the explanation needed for the first titles suggested, and states directly what has to be derived from the prior title.

3. Net Revenue from Sales \$.
less: Current Out-of-Pocket Costs

Funds provided by Operations \$.

Title 3 is an added improvement over Title 1, in that it gives important information as to the total amount of funds received from operations as well as the net amount of funds available from operations.

It seems to the writer that use of Title 2 or Title 3 would do much to enhance the usefulness of fund statements. The adoption of either of the latter two titles would at least help to displace the fallacious concept that "profit" or "depreciation" indicates "money" or "funds." After all, the purpose of a fund statement very often is to explain why, despite large profits and/or large depreciation allowances, there are no funds available with which dividends may be paid or new equipment purchased.

In addition to changing from these confusing and incorrect titles, the customary fund statements might be improved by minor variations, such as cross-indexing the "Changes in Net Working Capital" statement to the "Source and Application of Funds" statement. Another improvement might be effected by arranging the "Changes in Net Working Capital" so as to show separately (within the statement) the changes in "current assets (other than prepaid expenses)," in "prepaid expenses," in "current liabilities (other than ac-

crued)," and in "accrued liabilities." Within limits, the latter proposal seems desirable because changes in these various current items affect the firm's funds differently. Also, it is often necessary to explain in which way prepaid or accrued items may be said to be sources or applications of funds, and such explanations are simplified by a segregation of the items.

The foregoing suggestions are not made with the intention or the hope of standardizing fund statements. It seems much more desirable that the fund statement, which is primarily a tool of analysis, should be flexible so that it may be adjusted to fit varying situations or requirements.

The following paragraphs are submitted as an example of the adoption of certain recommended revisions in the fund statement and the application of the fund statement to fit a special case.

OVER-ALL EARNINGS OF COMPANY (fictitious names used throughout)

Table I summarizes the earnings of the Fulton Manufacturing Company since 1938. The data for full years have been taken from audit reports prepared by a CPA firm. The figures for 1942 were obtained from the Company's books.

Table I shows that operations of the Company have expanded steadily in the last few years. In 1941, sales were \$1,082,153, which is 4.6 times the sales of \$233,208 made in 1938 and 2.4 times the sales of \$454,926 made in 1939. In the first half of 1942, net sales amounted to \$862,468; on an annual basis, this would be \$1,724,936, or 1.6 times the sales in 1941.

The net income of the Company has also shown great increases. As shown by the table, the Company suffered a loss of \$4,439, or 1.9% of net sales in 1938. Since then, the Company has continually shown profits. Net income amounted to \$16,577, or 3.6% of sales in 1939; \$20,003, or 3.0% of sales in 1940; \$34,961, or 3.2% of sales in 1941; and \$18,486, or 2.1% of sales in

TABLE I
SALES, NET INCOME, AND NET WORTH
January 1, 1938, to June 30, 1942

Year	Net Sales	Net Income	Net Income as a % of Net Sales	Net Worth at Beginning of Period	Net Income as a % of Net Worth
1938	\$233,208	\$4,439	1.9%	\$206,457	2.2%
1939	454,926	16,577	3.6%	202,018	8.2%
1940	661,001	20,003	3.0%	214,595	9.3%
1941	1,082,153	34,961	3.2%	230,598	15.2%
First Half 1942	862,468	18,486	2.1%	261,559	14.1% ¹

¹ On an annual basis.

the first six months of 1942. On an annual basis, net income in 1942 at the present rate of earnings would be \$36,972, or 5.8% more than the net income in 1941.

These figures show that, although the amount of profits currently earned is greater than in the three preceding years, the rate of return is less. Net income to net sales has dropped from 3% to 2%, a close margin for a machinery manufacturing concern, especially for a concern that has a very poor cost system. The current trend, as revealed in Table I, indicates

that the applicant may encounter profit difficulties despite expanding production and sales.

FINANCIAL OPERATIONS OF COMPANY

An analysis of the disposition of funds seems to be very pertinent for this Company. Rapid expansion of production and sales often leads to financial disaster even with increasing profits. Therefore, Tables II and III have been prepared to show the movement of funds of the Company from January 1, 1939 to June 30, 1942.

TABLE II
INCREASE IN NET WORKING CAPITAL, AS ADJUSTED
January 1, 1939 to June 30, 1942

A. Source of Funds				
1. Increases in Accrued Current Liabilities:				
Accounts Payable—trade	\$129,735			
Accrued Payroll	2,025			
Accrued Taxes	40,194	\$171,954		
2. Decreases in Deferred Charges:				
Turbine Patents	\$ 675			
Development Expenses	8,500	9,175		\$181,129
3. Amount of Increase in Net Working Capital (see Table III)				154,895
Total				<u>\$336,024</u>
B. Application of Funds				
1. Increases in Current Assets and Prepaid Expenses:				
Cash	\$ 4,632			
Notes and Accounts Receivable	129,052			
Merchandise Inventory	193,832			
Misc. Prepaid Expenses	1,208	\$328,724		
2. Decreases in Accrued Expenses:				
Accrued Commissions		7,300		
Total				<u>\$336,024</u>

Table II shows the increase in funds invested in working capital. This table shows that net working capital of the firm was \$154,895 greater on June 30, 1942, than it was on January 1, 1939. This \$154,895 increase is before considering the additional amount due on notes payable to the bank and the increase in officers' salaries and dividends payable. The notes payable to the bank, while technically current, have been renewed every year since 1935 and are treated as a fixed liability by both the bank and the Company. The 4 officers of the Company hold all of the capital stock outstanding, and customarily leave in the firm a sizeable proportion of the approximately \$40,000 a year deducted as officers' salaries, and almost all of the amount of the dividends declared. (If the notes payable, officers' salaries and dividends payable are deducted in computing net working capital, the amount of the increase, from January 1, 1939, to June 30, 1942, becomes only \$18,908.)

The \$154,895 increase in net working capital as shown in Table II is largely the result of an increase of \$129,052 in notes and accounts receivable and an increase of \$193,832 in merchandise inventory, offset by an increase of \$129,735 in trade accounts payable and a \$40,194 increase in tax indebtedness. These increases in working-capital accounts are consistent with the increase in operations. The ratio of net sales to merchandise inventory averaged 4.4 to 1 in 1939 and is currently about 6 to 1. The ratio of net sales to notes and accounts receivable has shown a slight drop from 13 to 1 to about 11 to 1, and the ratio of net purchases to accounts payable has remained at about 6.5 to 1. The \$40,194 increase in taxes payable represents largely a mid-year accrual of current taxes (including \$16,500 for income taxes) which are not yet due.

The individual increases and decreases in working-capital accounts added to-

gether reveal that: the Company has appropriated a total of \$336,024 for increased investment in current assets and prepaid expenses, and the reduction of certain accrued expenses; \$181,129 of that amount was financed by increasing current liabilities and decreasing deferred charges, and the remaining \$154,895 was obtained from other sources (shown in Table III).

A condensed analysis of the major fund movements from January 1, 1939, to June 30, 1942, is presented in Table III, which is a Statement of Source and Application of Funds. The first half of the table shows the sources, other than changes in working-capital accounts, which have been relied upon by the Company for its expansion. Net sales are revealed as the greatest source of funds. The Profit and Loss Statements, and the Fund Statement below, show that the Company has made sales of \$3,060,548 in the last three years and a half. During the same period the Company incurred operating expenses, excluding depreciation and officers' salaries, of \$2,781,483, and appropriated \$23,236 as depreciation expense and \$109,941 as officers' salaries. As a result, net income shown in the Profit and Loss Statements for the three years and a half amounted to \$90,027 after provisions for income taxes amounting to \$55,861.

Table III reveals that if depreciation expense is not deducted from revenue because it represents disbursements of prior years, and if the officer-owners' salaries are treated separately, there is left a \$223,204 excess of sales revenue over what might be called "out-of-pocket" costs. In addition to this amount realized from the excess of sales over cash expenses (to outsiders), the Company secured needed funds by borrowing \$100,000 more from the bank, and obtained \$8,050 from a sale of capital stock made to equalize the ownership holdings.

Of the \$331,254 so secured, this table shows that the Company spent \$89,956 in

TABLE III
SOURCE AND APPLICATION OF FUNDS, JANUARY 1, 1939
TO JUNE 30, 1942

A. Source of Funds			
1. Net Revenue from Sales	\$3,060,548		
less: Current Out-of-Pocket Costs ¹ (Except Officers' Salaries ²)		2,837,344	
Funds Provided by Operations			\$223,204
2. Borrowed from Bank—Notes Payable ³		100,000	
3. Sale of Capital Stock		8,050	
Total			<u>\$331,254</u>
B. Application of Funds			
1. Increases in Fixed Assets:			
Buildings	\$ 25,379		
Machinery	62,860		
Furniture and Fixtures	1,717	\$ 89,956	
2. Increases in Net Working Capital ⁴			154,895
Funds Applied Within the Business			\$244,851
3. Dividends and Officers' Salaries ²	\$122,390		
less: Increase in Dividends and Officers' Salaries Payable	35,987	86,403	
Total			<u>\$331,254</u>

¹ Includes only expenses represented by fund disbursements since January 1, 1939.

² The officers of this Company hold all the capital stock outstanding.

³ See footnote 4 for explanation.

⁴ Adjusted to eliminate effect of Notes Payable to Bank, Dividends Payable, and Accrued Officers' Salaries, which in this Company have the characteristics of fixed liabilities.

expansion of plant facilities, buying \$62,860 worth of new machinery and investing \$25,379 in a new plant building. The other major investment of funds is shown to have been the \$154,895 increase in net working capital, while the remainder, \$86,403, represents the amount of dividends and officers' salaries withdrawn in the last three and a half years by the four officer-owners. In other words, the Company has raised \$331,254, mainly from operations and borrowing, since January 1, 1939; \$86,403 of that amount

has been withdrawn by the owners (but \$8,050 of the \$331,254 represents re-investment by one of the owners in the purchase of additional stock), and the remainder, \$244,851, has been used to meet the increased needs of war production.

The expansion of the last three and a half years has not been without dangerous effect on the financial structure of the firm. Indicative of this is the drop in the ratio of current assets to current liabilities,¹ which was 3.9 to 1 on December 31, 1938, and 2.3 to 1 on June 30, 1942. If the note payable to the bank is included in the current liabilities, the current ratio shows a drop from 2.8 to 1 on December 31, 1938, to only 1.5 to 1 on June 30, 1942. At the same time, the percentage relationship of total liabilities (all technically current) to owners' equity² has changed from 25% to 94%.

Summarized, our financial analysis shows that the applicant is operating on a dangerously low profit margin with a weak financial structure and is facing a real threat of financial disaster, despite a conservative profit-withdrawal policy, because of the increased amount of funds required for the present scale of operations.

COSTS UNDER GOVERNMENT CONTRACTS

We are witness to a new stressing of cost accounting. For experienced cost accountants there is little new in most of the problems presented. But independent cost auditing is new and sometimes it proves to be a headache to the cost accountant under audit. It is not clear as yet where the strain comes from: perhaps from the War itself, or from the novelty of working under governmental contract, from the feeling that capitalistic enterprise is at fault, or

¹ Excluding notes payable to bank and accrued officers' salaries and dividends.

² Including accrued officers' salaries and dividends.

from the fact that cost accounting principles are hard for people of other training to grasp. On the other hand, there may be less strain than the outpouring of literature might seem to suggest. It is not impossible that much of what is being written merely reflects the effort to share with others the new-found knowledge of some who have not heretofore given much thought to cost accounting matters.

On some such background, CHARLES F. SCHLATTER writes about cost under government contracts as follows:

Manufacturers who have contracted with the government to produce for the war effort have encountered many new and difficult problems. Some of these problems arise in good cost accounting, but many more arise from its absence.

A few of the difficulties are traceable to a misunderstanding, on the part of both the manufacturers and the government auditors, of the distinction between cost accounting for products and cost accounting for specific contracts. Quite naturally other difficulties not concerned with accounting are encountered, but those are not under consideration here.

A manufacturer with a good cost system properly operated may avoid most of the difficulties of presenting proper costs to the government for reimbursement. A manufacturer with a good cost system improperly operated may expect many difficulties. One with a poor system, or none at all, is in for real trouble.

Most of the speeches made and the articles written on the subject of accounting for war contracts are designed to assist accountants in plants in which good cost systems either have not been installed, or had not been installed prior to the acceptance of government business.

The growing quantity of literature on the subject is no indication that government contracts require a new and special system of accounting. On the contrary,

these contracts are only stimulating greater interest in the old principles of good cost accounting. Nothing that a student has learned about cost finding needs to be unlearned. Yet there is a fundamental point of difference not usually stressed in accounting for civilian production, which is as follows:

In the usual accounting for civilian production, the cost procedure ends when the goods are finished and ready for sale. The unit cost of finished goods is the end-cost. What happens afterward gives no occasion for an entry in the factory cost accounts.

In accounting for government production, the costing procedure ends only when the entire contract has been carried out. The specific contract is the unit for which costs must be found. The contract commonly calls not only for production of a certain quantity of goods, but also for packing, shipping, and delivery at some far or near point. In some cases, the contract also calls for the installation and servicing of certain products, such as machinery and equipment. Therefore, cost accounting for government contracts in many cases must carry on beyond the point where it usually stops in costing civilian production. The costing procedure must include not only the manufacturing costs of the product as in civilian production, but also all other costs of the contract as well, such as expenses of idle machinery and equipment if the idleness is attributable to government business; delivery, installation, and servicing costs; general corporate and administrative expenses applicable to the particular contract; bidding and selling expenses attributable to the contract; and sundry others, including, surprisingly enough, "certain kinds of advertising of an industrial or institutional character, placed in trade or technical journals, not primarily with the object of selling particular products but essentially for the purpose of offering financial sup-

port to such trade or technical journals."¹

At the present time (1943) our government is the largest buyer in the world. It buys many things in the open market; but, perhaps, its largest acquisitions are by means of contracts with manufacturers who produce goods to its specifications and for its use in carrying on the War.

In former wars many manufacturers were accused of profiteering. In an attempt to avoid, so far as possible, profiteering in this war, the government has made many contracts with producers on a "cost-plus-a-fixed-fee" basis. In a "cost-plus-a-fixed-fee" contract the government agrees to pay:

- (a) All "reasonable" costs incurred by the manufacturer in carrying out his part of the contract, and
- (b) a sum (not a percentage) specifically stated in the contract as a "fee" to the manufacturer for his managerial services in performing his part of the agreement.

The grant by the government of a "fixed fee" limits the profit that the manufacturer might otherwise make. Because the government limits the profit, it must stand ready to pay all "reasonable" costs. This means that the manufacturer is protected against possible losses because he has waived his opportunities of making large profits by accepting a fee for his services.

As might be expected, the relationships between the contracting parties may be materially affected by the interpretation of "reasonable costs." When dealing with competent government auditors, managers accustomed to the use of reliable cost-accounting data in the control of costs in civilian production may be expected to have less difficulty in establishing the reasonableness of an item of cost than others.

The costs for which the government

¹ *Explanation of Principles for Determination of Costs under Government Contracts*. War and Navy Departments (Government Printing Office).

stands ready to reimburse the manufacturer in reasonable amounts include the following (This tabulation also is quoted from the government bulletin: *Explanation of Principles for Determination of Costs under Government Contracts*):

MANUFACTURING COSTS:

Direct shop costs: materials and parts; direct labor; shop engineering expense; other direct shop costs.

Indirect shop costs: supplies and sundry materials; indirect labor; service and maintenance; fixed charges; other indirect shop costs.

Other manufacturing costs: amortization of patents, purchased designs, etc.; engineering and development expenses.

OTHER CONTRACT PERFORMANCE COSTS:

Delivery costs; installation and servicing costs; sundry specific and servicing costs.

ADMINISTRATIVE AND DISTRIBUTING EXPENSES:

General corporate and administrative expenses; bidding and selling and distribution expenses.

If there is evidence of unreasonableness, reimbursement may be withheld even if the item in question falls among the admissible costs listed in the foregoing section. The following are some examples in which full reimbursement should not be expected:

1. For materials and supplies which have been purchased at an inflated price from a related business unit, or from any other source.
2. For material costs from which deductions have not been made for all discounts, both trade and cash discounts, if in excess of 1 per cent, and for other rebates, allowances, returns, and scrap values.
3. For materials purchased in excess of need on the contract.

4. For compensation to individual officers and employees in excessive amounts as compared with payments to those same individuals prior to the acceptance of government contracts.
5. For excessive losses on defective work caused by gross negligence.

The following may be named as among the many items not admissible for the purpose of computing the cost of performing a government contract (as any cost accountant should know):

Allowance for interest on invested or borrowed capital.

Commissions, bonuses, and special premiums under whatever name, paid in connection with negotiations for or procurement of a government contract.

Losses on other contracts.

Losses from sales or exchanges of capital assets.

Amortization of unrealized appreciation of values of assets.

Expenses, maintenance, and depreciation of excess facilities other than reasonable stand-by facilities.

Income and excess profits taxes.

Bond discounts and finance charges.

Bad debt losses.

Apportionment of costs between products for civilian consumption on the one hand and for government business on the other, and the further division of government costs among the several contracts must be made in accordance with generally accepted cost principles. Particular care must be exercised in the accounting treatment of premium wages for overtime so that such wages may not all be allocated only to government contracts if they should be allocated between civilian and government business.

Any method of burden application is acceptable which, in the judgment of an accountant familiar with good practices, is appropriate under the conditions.

The method of pricing materials into process customarily used by the contractor is acceptable, provided it is one of the following five methods: First-in, first-out; last-in, first-out; average cost; standard cost; specific purchase price. The contractor should not change from his customary method to another, nor use a method not listed in this paragraph, without governmental permission.

Although the explanations in the preceding paragraphs of these notes were given in particular relation to "cost-plus-a-fixed-fee" contracts, they apply with almost equal force to contracts in which the manufacturer is to receive a fixed price for his products.

The government has established the practice of including a renegotiation clause in fixed-price contracts. Under this clause, the price named in the original contract may be renegotiated (downward) if it becomes apparent that the old price will yield more than a "fair" profit to the manufacturer. The government claims the power to renegotiate the contracts even for some time after the goods have been manufactured, delivered to, and accepted by the government. If some contracts show losses and others show profits, the over-all net profit is considered in determining whether or not to renegotiate the prices.

Because it must judge whether a manufacturer with a fixed-price contract is making too much profit, and whether renegotiation is desirable, the government requires that the same attention be given to costs and to auditing of costs as is demanded under the "cost-plus-a-fixed-fee" contracts. If the government auditors find the costs inflated to conceal large profits, the contract is renegotiated at a new price to reduce the actual profit to a figure acceptable to the government. This virtually alters the fixed-price agreement to a cost-plus-a-fixed-fee contract.

PROFESSIONAL EXAMINATIONS

A Department for Students of Accounting

HENRY T. CHAMBERLAIN

THE FOLLOWING problems are the second half of the November, 1942, C.P.A. Examination prepared by the Board of Examiners of the American Institute of Accountants. The examinee was given six hours to solve all problems. The problems were weighted as follows: problem 1, 14 points; problem 2, 16 points; problem 3, 20 points.

No. 1

Samuel Gifford died on July 18, 1941. The executor, having paid all debts, bequests, and expenses, and expecting no more transactions after June 30, 1942, desired to ask the court for his discharge and for an order to turn the remaining assets of the estate over to the trustee named in the will.

An inventory had been filed with the court on August 15, 1941, consisting of the following items:

Cash in First National Bank.....	\$ 4,533.12
Cash in closed bank.....	2,050.50
Real estate, valued by court appraiser at.	38,750.00
Home furnishings.....	6,824.00
Stocks, at market	
AB Company preferred.....	22,865.00
AB Company common.....	3,738.20
Parkhurst Transit Co. common, at nominal value.....	100.00
U. S. Savings Bonds, dated April 1, 1941, due April 1, 1951, in the amount of \$50,000.....	37,500.00
Accrued interest at 2.9%.....	326.25
	<u>\$116,687.07</u>

In the latter part of September, 1941, discovery was made of another checking account in the Second National Bank, with a balance of \$2,500 and of \$125.50 cash in the office safe. Insurance was collected in the amount of \$58,000; also a dividend of \$1,250 on the AB Company

preferred which had been declared on June 1, 1941.

On June 15, 1942, the executor sold one half of the AB Company preferred stock for \$13,500 and the Parkhurst Transit Company common for \$200. Other receipts during the executor's administration consisted of rents, \$4,526; dividends, including those declared before the testator's death, \$4,025; collection on deposit in closed bank, \$465. All receipts were deposited by the executor in the First National Bank.

Property taxes, accrued at date of death, were \$1,575.20; and household debts on that date amounted to \$2,111.00. The executor paid \$20,000 bequests and \$1,000 executor's fee as specified in the will; also \$18,262.50 estate tax, \$3,336.95 property taxes including those accrued at date of death, \$750 funeral expenses, \$88.50 court costs, as well as the household debts. The widow received allowances to the aggregate sum of \$4,800 as directed by the court.

The accrued interest on U. S. Savings Bonds, \$326.25, and the annual rate of 2.9% are assumed to be correct.

From the foregoing information prepare:

- The executor's charge and discharge statement at June 30, 1942, accompanied by—
- Inventory of principal.
- Statement of principal and income cash.

No. 2

The Boylston Manufacturing Company made \$70,000 gross profit in 1940 and \$37,000 in 1941, and wants to know what has caused the decline of \$33,000. The

following information was given by the company:

	1940	1941
Net sales		
Product A.....	\$100,000	\$120,000
Product B.....	50,000	40,000
Product C.....	25,000	25,000
Together.....	<u>\$175,000</u>	<u>\$185,000</u>
Cost of goods sold.....	105,000	148,000
Gross profit.....	<u>\$ 70,000</u>	<u>\$ 37,000</u>

The quantity and quality of raw materials entering into each unit of product have remained unchanged throughout the two years.

No inventories were on hand at the beginning or end of either year.

Scrap from the fabrication of Products A and B is the raw material for Product C. Product C has been treated as a by-product and the cost of raw material entering into it has been regarded as an amount equal to its selling price less the direct labor expended in making it a marketable product. This "cost" has been credited $\frac{1}{2}$ and $\frac{1}{3}$, respectively, to the material costs of Products A and B, for the reason that the proportion of scrap material from the fabrication of the two major products has been 4 to 1.

Upon analysis of the books the following cost data were extracted from the production accounts:

Cost of production in 1940:

	Units	Material	Labor	Overhead	Together
Product A.....	500	\$40,000	\$10,000	\$10,000	\$ 60,000
Product B.....	2,500	10,000	5,000	5,000	30,000
Product C.....	1,000	16,000	9,000		25,000
Together.....		<u>\$66,000</u>	<u>\$24,000</u>	<u>\$15,000</u>	<u>\$105,000</u>

Cost of production in 1941:

	Units	Material	Labor	Overhead	Together
Product A.....	600	\$60,000	\$15,000	\$15,000	\$ 90,000
Product B.....	1,600	13,000	10,000	10,000	33,000
Product C.....	1,250	10,000	15,000		25,000
Together.....		<u>\$83,000</u>	<u>\$40,000</u>	<u>\$25,000</u>	<u>\$148,000</u>

Because of the confusion that would otherwise enter into the comparison, it was agreed with the management that the raw material in each unit of Product C manufactured and sold during both years should be considered as costing \$8. It was also agreed to redistribute overhead to the three products on a direct-labor-cost basis.

Prepare a statement showing to what extent the decline in the gross profit was attributable to changes in sales volume, prices, and production costs. Show computations of adjusted unit costs.

No. 3

From the April 30, 1940, trial balance of the general fund of the City of X and the transactions of the succeeding year stated below, prepare:

- Balance-sheet of April 30, 1941.
- Statement of revenues, expenditures, and surplus for the year ended on that date.
- Work sheet.

Trial Balance—April 30, 1940

	Debits	Credits
Cash on hand.....	\$ 910	
Cash in banks.....	54,670	
Petty cash.....	100	
Taxes receivable—1938 levy.....	22,420	
Reserve for taxes not collected—1938 levy.....		\$ 22,420

(Continued next page)

Taxes receivable—1939 levy . . .	260,000	
Reserve for taxes not collected— 1939 levy		260,000
Taxes receivable—1939 levy, pledged on anticipation notes . .	5,000	
Stores inventory	3,700	
Due from water fund	8,000	
Accounts payable		9,240
Tax-anticipation notes payable . .		5,000
Reserve for encumbrances		14,140
Special reserve for contingencies .		2,000
Unappropriated surplus		42,000
	<u>\$354,800</u>	<u>\$354,800</u>

(1) The estimated revenues for the year ended April 30, 1941, amounted to \$405,000.

(2) The city's share of general property taxes from the 1940 tax-levy amounted to \$285,000. The accounting for tax revenues is on a cash basis, but a control account for each tax levy is set up.

(3) The operating budget was approved in the sum of \$408,000.

(4) Revenues were collected in the sum of \$392,450, as follows:

1938 levy	\$ 22,420
1939 levy	233,580
1939 levy (pledged)	5,000
Miscellaneous revenue	131,450
	<u>\$392,450</u>

(5) Tax-anticipation notes against the 1940 levy were issued and cash was received in the amount of \$20,000. Receipts from tax anticipation notes are entered as revenues, and an equivalent amount of taxes receivable is set up as an asset against the liability created by the notes.

(6) Purchase orders were issued for commodities in the sum of \$138,610.

(7) Invoices received, approved and vouchered amounted to \$139,033, which

included \$5,310 purchases for store inventory.

(8) Tax-anticipation notes against the 1939 levy for \$5,000 and interest thereon amounting to \$7 were paid.

(9) Payrolls were vouchered and approved for payment in the amount of \$246,500.

(10) Supplies were issued on stores vouchers from the central stores in the amount of \$6,760, which included \$1,500 stores issued to the water fund.

(11) Warrants were issued to cover interest \$6,000 and principal of bonds \$10,000.

(12) Warrants were issued in payment of approved vouchers in the amount of \$383,643.

(13) The petty-cash fund was increased \$100.

(14) The general fund advanced \$5,000 to the water fund.

(15) Total cash deposited in the banks amounted to \$412,100.

(16) An analysis of the appropriation ledger showed that purchase orders encumbered amounted to \$387 more than the corresponding purchase orders liquidated.

(17) The encumbrances as at April 30, 1941, amounted to \$18,640.

(18) The City Council authorized the setting up of a reserve for stores for \$10,000.

(19) The necessity for a special reserve for contingencies was terminated and this item closed to surplus.

(20) Taxes collected in prior years were refunded in the amount of \$1,000.

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Receipts

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Cash
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Solution to Problem 1

ESTATE OF SAMUEL GIFFORD—EXECUTOR Statement of Principal and Income Cash August 15, 1941 to June 30, 1942

	Total	Income Cash	Principal Cash
Receipts:			
Cash in testator's bank account, 1st Nat'l.....	\$ 4,533.12	\$	\$ 4,533.12
Cash in testator's bank account, 2nd Nat'l.....	2,500.00		2,500.00
Cash on hand.....	125.50		125.50
Collections on life insurance policies.....	58,000.00		58,000.00
Dividends received.....	4,025.00	2,775.00	1,250.00
A.B. Company preferred stock (carried at \$11,432.50).....	13,500.00		13,500.00
Sale of Parkhurst Transit Co. common (carried at \$100.00).....	200.00		200.00
Rents collected.....	4,526.00	4,526.00	
Collection on deposit in closed bank.....	465.00		465.00
Total receipts.....	\$87,874.62	\$ 7,301.00	\$80,573.62
Disbursements:			
Property taxes paid.....	\$ 3,336.95	\$ 1,761.75	\$ 1,575.20
Debts of the testator.....	2,111.00		2,111.00
Bequests paid.....	20,000.00		20,000.00
Executor's fee.....	1,000.00		1,000.00
Estate tax paid.....	18,262.50		18,262.50
Funeral expense.....	750.00		750.00
Court costs.....	88.50		88.50
Payments to widow.....	4,800.00		4,800.00
Total disbursements.....	\$50,348.95	\$ 1,761.75	\$48,587.20
Balance in First National Bank at June 30, 1942.....	\$37,525.67	\$ 5,539.25	\$31,986.42

ESTATE OF SAMUEL GIFFORD—EXECUTOR Charge and Discharge Statement August 15, 1941 to June 30, 1942 As to Principal

The executor charges himself with:

Assets per inventory

Cash in First National Bank.....	\$ 4,533.12
Cash in closed bank.....	2,050.50
Real estate.....	38,750.00
Home furnishings.....	6,824.00
A.B. Company preferred stock.....	22,865.00
A.B. Company common stock.....	3,738.20
Parkhurst Transit Co. common stock.....	100.00
U. S. Savings Bonds due 4-1-51, maturity value \$50,000.00.....	37,500.00
Accrued interest to 7-18-41 on above bonds.....	326.25

Total assets per inventory..... **\$116,687.07**

Assets subsequently discovered:

Cash in Second National Bank.....	\$ 2,500.00
Cash on hand.....	125.50
Collections of insurance policies.....	58,000.00
Dividend on A.B. Co. preferred stock, declared 6-1-41.....	1,250.00
Gain on assets sold.....	61,875.50
	2,167.50

Total..... **\$180,730.07**

The executor credits himself with:

Debts of the testator paid.....	\$ 3,686.20
Funeral expense.....	750.00
Executor's fees and court costs.....	1,088.50
Estate taxes paid.....	18,262.50
Bequests paid.....	20,000.00
Allowance to widow.....	4,800.00
Balance of assets.....	\$132,142.87

Inventory of assets on hand June 30, 1942:

Cash in First National Bank.....	\$ 31,986.42
Cash in closed bank.....	1,585.50
Real estate.....	38,750.00
Home furnishings.....	6,824.00
A.B. Company preferred stock.....	11,432.50
A.B. Company common stock.....	3,738.20
U. S. Savings Bonds due 4-5-51, maturity value \$50,000.00.....	37,500.00
Earned interest on above bonds to 7-18-41.....	326.25
Total assets as above.....	\$132,142.87

*As to Income**The executor charges himself with:*

Dividends received.....	\$ 2,775.00
Rents collected.....	4,526.00
Total.....	7,301.00

The executor credits himself with:

Real estate taxes paid.....	1,761.75
Balance represented by cash in First National Bank.....	\$ 5,539.25

Solution to Problem 2

BOYLSTON MANUFACTURING CO.
Statement Accounting for Variation in Gross Profit
Years 1940 and 1941

	Product A	Product B	Product C	Total
Increase in gross profit due to increase in selling price:				
Product A—no change.....	—			
Product B—(1600×\$5.00).....		\$ 8,000.00		
Product C—decrease (1250×\$5.00).....			*\$ 6,250.00	\$ 1,750.00
Decrease in gross profit due to decrease in volume of sales:				
Product A—(100×\$74.70).....	\$7,470.00			
Product B—decrease (900×\$12.11).....		* 10,899.00		
Product C—(250×\$2.375).....			593.75	* 2,835.25
Decrease in gross profit due to increase in costs:				
Product A:				
Material (600×\$7.20).....	* 4,320.00			
Labor (600×\$5.00).....	* 3,000.00			
Overhead (600×\$3.125).....	* 1,875.00			
Product B:				
Material (1600×\$3.485).....		* 5,576.00		
Labor (1600×\$4.25).....		* 6,800.00		
Overhead (1600×\$2.65625).....		* 4,250.00		
Product C:				
Material—no change.....			—	
Labor (1250×\$3.00).....			* 3,750.00	
Overhead (125×\$1.875).....			* 2,343.75	* 31,914.75
	*\$1,725.00	*\$19,525.00	*\$11,750.00	*\$33,000.00

* Decrease.

Recomputation of Costs and Gross Profit

	1940			1941		
	Amount	Units	Unit Price	Amount	Units	Unit Price
Sales.....	\$100,000.00	500	\$200.00	\$120,000.00	600	\$200.00
Material.....	\$ 46,400.00	500	\$ 92.80	\$ 60,000.00	600	\$100.00
Labor.....	10,000.00	500	20.00	15,000.00	600	25.00
Overhead.....	6,250.00	500	12.50	9,375.00	600	15.625
	\$ 62,650.00	500	\$125.30	\$ 84,375.00	600	\$140.625
Gross profit.....	\$ 37,350.00	500	\$ 74.70	\$ 35,625.00	600	\$ 59.375

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	Product B			Product B		
Sales.....	\$ 50,000.00	2500	\$ 20.00	\$ 40,000.00	1600	\$ 25.00
Material.....	\$ 11,600.00	2500	\$ 4.64	\$ 13,000.00	1600	\$ 8.125
Labor.....	5,000.00	2500	2.00	10,000.00	1600	6.25
Overhead.....	3,125.00	2500	1.25	6,250.00	1600	3.90625
	<u>\$ 19,725.00</u>	<u>2500</u>	<u>\$ 7.89</u>	<u>\$ 29,250.00</u>	<u>1600</u>	<u>\$ 18.28125</u>
Gross profit.....	<u>\$ 30,275.00</u>	<u>2500</u>	<u>\$ 12.11</u>	<u>\$ 10,750.00</u>	<u>1600</u>	<u>\$ 6.71875</u>
	Product C			Product C		
Sales.....	\$ 25,000.00	1000	\$ 25.00	\$ 25,000.00	1250	\$ 20.00
Material.....	\$ 8,000.00	1000	\$ 8.00	\$ 10,000.00	1250	\$ 8.00
Labor.....	9,000.00	1000	9.00	15,000.00	1250	12.00
Overhead.....	5,625.00	1000	5.625	9,375.00	1250	7.50
	<u>\$ 22,625.00</u>	<u>1000</u>	<u>\$ 22.625</u>	<u>\$ 34,375.00</u>	<u>1250</u>	<u>\$ 27.50</u>
Gross profit.....	<u>\$ 2,375.00</u>	<u>1000</u>	<u>\$ 2.375</u>	<u>*\$ 9,375.00</u>	<u>1250</u>	<u>*\$ 7.50</u>

* Loss.

Solution to Problem 3

CITY OF X General Fund Balance Sheet April 30, 1941

Assets

Cash:		
In bank.....	\$ 56,120.00	
On hand.....	1,160.00	
Petty cash.....	200.00	\$ 57,480.00
Taxes receivable:		
1939 levy.....	\$ 26,420.00	
Less reserve for taxes not collected.....	26,420.00	—
1940 levy—unpledged.....	\$265,000.00	
Less reserve for taxes not collected.....	265,000.00	—
1940 levy—pledged.....	\$ 20,000.00	
Less tax-anticipation notes.....	20,000.00	—
Due from water fund.....		14,500.00
Stores inventory.....		2,250.00
Total.....		<u>\$ 74,230.00</u>

Liabilities

Liabilities:		
Accounts payable.....	\$ 11,130.00	
Reserve for encumbrances.....	18,640.00	29,770.00
Surplus:		
Unappropriated surplus.....	\$ 34,460.00	
Reserve for stores.....	10,000.00	44,460.00
Total.....		<u>\$ 74,230.00</u>

CITY OF X
Working Trial Balance
April 30, 1940 to April 30, 1941

	Trial Balance April 30, 1940	Transactions for the Year	Trial Balance April 30, 1941 before Closing	Closing Entries	Trial Balance April 30, 1941 after Closing
Cash on hand.....	\$ 910.00	(4a) \$392,450.00 (13) \$ 100.00	\$ 1,160.00	\$	\$ 1,160.00
Cash in bank.....	54,670.00	(5a) 20,000.00 (15) 412,100.00	56,120.00		56,080.00
Petty cash.....	100.00	(6) 5,007.00			
Taxes receivable—1938 levy.....	22,420.00	(11) 16,000.00			
Reserve for taxes not collected—1938 levy.....		(12) 385,540.00			
Taxes receivable—1939 levy.....	260,000.00	(14) 5,000.00	200.00		200.00
Reserve for taxes not collected—1939 levy.....		(20) 1,000.00			
Taxes receivable—1940 levy.....	5,000.00	(4a) 22,420.00			
Stores inventory.....	8,000.00	(4a) 233,580.00	26,420.00		26,420.00
Due from water fund.....		(7a) 5,310.00 (10) 6,760.00			
Accounts payable.....	9,240.00	(14) 5,000.00 (7a) 139,033.00	11,130.00		11,130.00
Tax-anticipation notes payable.....	5,000.00	(12) 383,643.00 (9) 246,500.00			
Reserve for encumbrances.....	14,140.00	(7a) 5,000.00 (5a) 20,000.00	2,350.00		2,350.00
Special reserve for contingencies.....	2,000.00	(7b) 133,723.00 (6) 138,610.00	14,500.00		14,500.00
Unappropriated surplus.....	42,000.00	(16) 387.00			
		(19) 2,000.00 (19) 2,000.00	30,000.00	(22) 2,450.00	34,460.00
		(18) 10,000.00 (20) 1,000.00		(23) 2,010.00	
Estimated revenues.....	\$354,800.00	\$354,800.00	\$ 2,450.00	\$ 2,450.00	\$
Estimated budget surplus.....		(1) \$405,000.00 (4a) \$131,450.00			
Taxes receivable—1940 levy.....		(4b) 256,000.00 (4b) 256,000.00			
Reserve for taxes not collected—1940 levy.....		(3) 405,000.00 (5b) 20,000.00			
Appropriations.....		(2) 285,000.00 (5c) 20,000.00	265,000.00		265,000.00
Taxes receivable—1940 levy pledged on tax-anticipation notes.....		(5b) 20,000.00 (3) 405,000.00	405,000.00	(21) 405,990.00	
Appropriation encumbrances.....		(5c) 20,000.00 (7b) 133,723.00		(23) 2,010.00	
Appropriation expenditures:		(6) 138,610.00 (16) 387.00	20,000.00	(21) 4,500.00	20,000.00
Purchase orders.....		(7a) 133,723.00	4,500.00		
Interest on tax-anticipation notes.....		(8) 246,500.00			
Payrolls.....		(9) 246,500.00	401,490.00	(21) 401,490.00	
Stores' issues.....		(10) 5,260.00			
Bonds.....		(11) 10,000.00			
Interest.....		(64) 6,000.00			
Reserve for stores.....		(18) 10,000.00	10,000.00		10,000.00
Totals.....			\$791,640.00		\$385,650.00

For City of X Adjustments see page 175

Professional Examinations

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CITY OF X Statement of Revenues, Expenditures and Surplus For the Year Ending April 30, 1941

Revenues:

Taxes collected:

1938 levy.....	\$ 22,420.00
1939 levy.....	233,580.00
Miscellaneous revenue.....	131,450.00
Receipts from tax-anticipation notes against the 1940 levy for which taxes receivable, \$20,000.00 were pledged.....	20,000.00

Total revenues..... \$407,450.00

Expenditures:

Purchase orders paid.....	\$133,723.00
Purchase commitments.....	4,500.00
Payrolls.....	246,500.00
Stores' issues.....	5,260.00
Redemption of bonds.....	10,000.00
Bond interest.....	6,000.00
Interest on tax-anticipation notes.....	7.00

Total expenditures..... 405,990.00

Excess of revenues over expenditures..... \$ 1,460.00

Surplus:

Balance April 30, 1940.....	\$ 42,000.00
Add Reserve for special contingencies not needed and returned to surplus.....	2,000.00
	\$ 44,000.00
Deduct Refund of taxes collected in prior years.....	1,000.00
	43,000.00
Balance April 30, 1941.....	\$ 44,460.00

KEY TO ADJUSTMENTS

- (1) To record estimated revenues.
- (2) To record 1940 tax levy.
- (3) To record appropriations.
- (4a) To record collections for the year.
- (4b) To transfer unused reserves to revenue.
- (5a) To record sale of tax-anticipation notes.
- (5b) To transfer portion of reserve to estimated revenue.
- (5c) To transfer pledged taxes receivable to separate account.
- (6) To record appropriation encumbrances.
- (7a) To record approval of vouchers.
- (7b) To reverse encumbrances.
- (8) To record payment of tax-anticipation notes and interest.
- (9) To record approval of payrolls.
- (10) To record stores' issues.
- (11) To record payment of bonds and interest.
Note: This entry is upon the assumption that the general fund made appropriations for debt service.
- (12) To record payment of vouchers.
- (13) To record increase of petty cash fund.
- (14) To record advance to the water fund.
- (15) To record bank deposits.
- (16) To record reduction of encumbrances.
- (17) Proof of the correctness of this figure is as follows:
Reserve for encumbrances April 30, 1940..... \$ 14,140.00
Addition to reserve in (6) above..... 138,610.00
\$152,750.00
Reversal of encumbrances paid (7b) \$133,723.00
Reduction of encumbrances (16) .. 387.00 134,110.00
Balance of reserve April 30, 1941..... \$ 18,640.00
- (18) To provide reserve for stores as authorized by the council.
- (19) To close reserve for contingencies.
- (20) To record refund of taxes collected in prior years.
- Closing entries:
- (21) To close expenditures and encumbrances to appropriations.
- (22) To close excess of actual revenues over estimated revenues into surplus.
- (23) To close unexpended appropriations into surplus.

BOOK REVIEWS

Sidney G. Winter

Introductory Accounting. Donald D. Kennedy, George R. Esterly, and William J. von Minden. (New York: Ronald Press Company, 1942. Pp. xv, 702. \$4.50.)

The authors of this volume recognizing the emphasis in recent years upon the operation of a business as distinguished from its financial condition, have adopted a somewhat new approach to the study of accounting by presenting the profit-and-loss statement for examination as a starting point. The control function of accounting is constantly kept before the student but that understanding of the control function, per se, is only part of the authors' goal is indicated by their own words: "Showing the student the uses of accounting data develops in him an enhanced interest in his study."

One of the chief characteristics of the text is the avoidance of any procedure, such as entering cash in a General Journal, which has to be discarded later because it conforms with neither practice nor sound principles. Another characteristic is the absence of any attempt to avoid or circumvent difficult situations which are frequently encountered in accounting practice. Instead, emphasis is upon intelligent analysis of all situations as they logically occur. For example, a section which discusses intangible assets (page 57) is followed by a section which explains the three classifications of reserves (page 62).

One who observes the Table of Contents and finds the titles "Analysis of Profit and Loss Statement" (Chapter 6), "Analysis of Balance Sheet" (Chapters 7 and 8), and "Resources Provided and Applied" (Chapter 9) might well be expected to wonder whether or not he had read the title, *Introductory Accounting*, correctly. The fact that bookkeeping procedures involving debit and credit are first discussed in Chapter 11 may provoke mild amazement. One who studies the text through 230 pages of the explanation of the function and purpose of accounting, however, can hardly fail to recognize the apparent fact that the student is necessarily placed in a receptive and appreciative state of mind when he has reached that point in his study.

There are certain details in the text which demand special comment. For example, a discussion of those items to be included in or excluded from the principal account balance which appears in the profit-and-loss statement is begun on page 27. This seems to be an attempt to develop in the student a discriminating judgment in regard to proper classification of expenditures, rather than leaving the student to formulate principles for himself as many texts do after demonstrating a variety of items which ordinarily appear in the profit-and-loss statement.

On page 35 the student is told that the profit-and-loss statement seldom states exactly the profit or the loss. This is merely one illustration of a realistic approach to all phases of the subject. In the chapter on "Resources Provided and Applied," a very careful explanation is made of the cash cycle and the different ways in which resources can be provided or applied. The

explanations and illustrations are well done, and though the student has not studied the use of debits and credits, he should have little difficulty in grasping the significance of the statement or in understanding the proper method of preparing it.

Beginning on page 85 is a discussion of changes in balance-sheet items. Causes of changes are immediately segregated into two categories: transactions affecting only balance-sheet items and those affecting both balance-sheet items and expense or income. In the succeeding paragraphs the effects of changes are clearly shown by a series of diagrams made up of blocks, representing certain monetary values, resting upon a lever balanced upon its fulcrum.

Once the rules of debit and credit and the analyses of transactions have been discussed, the text follows through the bookkeeping procedures in approximately the same order—not in the same manner—as texts which use the journal approach to the study of accounting. Books of original entry, ledgers, trial balances, adjustments, work sheets, and closing entries are discussed and demonstrated in the order mentioned.

Four chapters (103 pages) are devoted to accounting for net worth of partnerships and corporations and long-term corporate obligations. Three final chapters deal with the control of costs, budgetary control, and trends in corporate reports, the final chapter reproducing parts of recent corporate reports to illustrate the current methods of presenting information to stockholders.

The text is well supplied with questions and problems following each chapter. It also contains two practice sets, the first dealing with a partnership and the second with a corporation. In each instance, the student is required to enter transactions for one month in journals ruled by himself from specific instructions. Both sets include year-end closing and statement preparation.

This volume is more than another text in introductory accounting. It is a contribution to accounting literature.

T. LEROY MARTIN

*Naval Torpedo Station
Newport, R. I.*

Accounting Fundamentals. Richard E. Strahlem. (New York: Ronald Press Company, 1942. Pp. x, 365. \$3.50.)

As stated in the preface, the purpose of the book is to make a suitable text available for engineering and other professional students, and for short courses in adult training, presumably such as those offered under the Engineering, Science and Management War Training program. The book, logically, stays throughout with the industrial type of company. It begins with the time-honored equation "Assets equals Equities" and proceeds through chapters on statements and accounts of the industrial organization; business forms; books of original entry; special journals and ledgers; the voucher system; closing, adjusting, post closing entries; work sheets, cost systems; material, labor and factory burden;

costs, valuation of assets and liabilities; and statement analysis. The author has done a good job in condensing so much material to so few pages. There is neither departure into new methods of teaching technique nor material which has not been covered in numerous writings, though not all in one place in such highly condensed form.

Obviously, it is a difficult and dangerous job to write on accounting for engineers, since there arises immediately the problem of sacrificing thoroughness for brevity. It seems that to teach the engineer accounting, there are two ways to go. We can say, "Mr. Engineer, you come over on the accountant's side and find out what all of our headaches are," or we can say, "Mr. Accountant, you go over on the engineer's side and find those places where the engineer comes in contact with accounting and confine your teaching to these spots." In short, is the aim to make an accountant of the engineer or is it to help him to be a better engineer?

To those who take the first view, the book will perhaps be as satisfactory as any available, though one can hardly fail to wonder whether the student does not come out of the course with a feeling of having been rushed and with a head full of definitions and rather vague notions as to principles and procedures.

Those who take the second view will be sharply disappointed. No particular objection would be raised to the first four chapters on industrial statements, accounts, and business forms since the engineer comes in contact with these and should have a reading knowledge of them. Some will wonder why the author stopped here and failed to keep going through the matter of valuation, so close to engineering appraisal work, and then on to statement analysis. Apparently, the thought of teaching beginners something commonly thought of as advanced is the stumbling block.

Those taking this second view will want to eliminate most of the material in chapters 6 through 11 which cover the accounting cycle from journalizing transactions through books of original entry, posting, taking trial balances, closing, and preparing work sheets. It would seem that little of this is necessary when considering the contacts the engineer has with accounting. If the shoe were on the other foot and the engineer were teaching the accountant, one would hardly expect the engineer, for example, to try to force the accountant to learn all the details of lettering on drawings and the many detailed rules of drawing. Rather, he would simply teach the accountant how to read a drawing.

In the chapters on cost accounting, much of the work dealing with the mechanics or bookkeeping side of cost accounting could be omitted. The production engineer comes in contact with such records as clock cards, time tickets, material requisitions, receiving reports, inventory records, etc., but beyond their purpose, how to fill them in, how to route them, how to approve them, how to use them for control purposes, etc., it seems rather a waste of time to rush him through the cost summarization process and particularly to insist that he must learn to express every cost transaction in the form of a journal entry.

Many engineers have their first contact with accounting through being required to make cost estimates

of plant items and products, through reading, interpreting, and exercising production control by using a multitude of cost and production reports pushed at them, through being asked to furnish information for a budget for the work under their control, through being asked such questions as should we make or buy this item, should we junk this machine and buy a new one, should we relocate this battery of machines, etc. None of these first contacts is covered in the book.

It would seem that, by taking this second point of view, thoroughness would not be unnecessarily sacrificed for the sake of brevity and limited time and that, instead of making a rather poor bookkeeper out of an engineer, we would be helping him to do a better job as an engineer.

Those who wish to use the book will find the problem material in the appendix satisfactorily matched with the chapters in the text. Some may wish for a greater number of problems in order to make a choice.

PAUL C. TAYLOR

Tulane University

Theory of Accounts. Revised Edition. Arthur H. Rosenkamm and William Wider. (New York: The Ronald Press Company, 1942. \$4.00.)

This text is a revision of the authors' previous work which was designed to acquaint students with the general theory of accounts and to assist them in their preparation for the Certified Public Accountant examination. It is an attempt to satisfy the needs of students in Schools of Business that offer a course in the Theory of Accounts as distinguished from a course in Accounting Practice or a combination of Accounting Theory and Practice.

The science of accounting, the authors assert, includes the organization, presentation, and interpretation of financial facts pertaining to enterprise. The accepted accounting principles "... are in effect the rules which govern the recording of business transactions and the treatment of accounts in financial and profit and loss statements" (p. 4). The theory of accounts is based upon the body of principles which found the science. The authors believe it should include the following: a special terminology, commercial arithmetic and actuarial science, control accounts supported by underlying records, a classification of accounts in the ledger to summarize operating results and financial condition, a basis for departmental distribution, methods for cost analysis of functions or products, factors which control the valuation of property and debts, accounting phases of net worth, classification of financial statements, and graphic presentation (pp. 6-7).

While the book is not intended as an introductory text, it does include (Chapter 2) a survey of elementary accounting principles. Double entry bookkeeping is reviewed without a regular treatment of account form. Balance sheet classification is outlined (Chapter 3). There is a brief discussion of bases of balance sheet valuation, e.g., going concern valuation, liquidation valuation, reproduction valuation. Capital and income receipts and expenditures are examined briefly (Chapter 4).

The balance of the book is an analysis of the accepted

accounting rules for the treatment of many accounting problems. There are separate chapters for depreciation and obsolescence, land and buildings and equipment, and other fixed tangible assets. A chapter each is devoted to the treatment of permanent investments, funds and intangible assets. Three chapters are devoted to current assets. Deferred charges to expense and prepaid expenses are treated in a single chapter. (The latter are said to be tangible with a salvage value while the former have no such qualities.) There is a chapter each on fixed liabilities, current liabilities, contingent liabilities and deferred credits to income, and net worth. Partnership problems are treated in two chapters while the accounting for corporations requires five chapters. Accounts and statements reflecting income and expense are treated in two chapters and there is a chapter devoted to the accounting for a single venture.

The book admirably fulfills one of its purposes. Students thoroughly familiar with its contents should be well prepared for the Certified Public Accountants' examination in the theory of accounts. Each chapter is fortified with a list of review questions, many of which have a code number to identify the New York State examination from which the particular question was adopted. The contents include many of the problems which generally appear in state board examinations and the analyses are satisfactory in the light of standards widely adopted by state boards.

Despite success in one venture, and this writer has no doubt that the book is a successful adjunct to the preparation for state board examinations, many questions may be raised concerning the book's achievements in the field of the general theory of accounts. In this instance more difficulty is encountered when judgment is attempted, for there are among accountants, few standards by which to judge an adequate theory. The authors have reached their goal from one point of view. The rules that govern the recording of business transaction and the rules by which such records are treated in statements of accounts are presented with dispatch. The special terminology is clearly defined and there is an excellent presentation of control accounts, departmentalization, cost analysis, and account classification. Nevertheless, the reader who is not concerned with a state board examination feels, when he finishes the book, some depression. A general theory should present an analysis of facts in their relation to one another. This book, like an algebra text, seems to solve a series of independent problems.

For example, there is no concerted effort to indicate the relation between the profit and loss statement and the balance sheet. The elements of the latter form approximately three-fourths of the text. However, there is no attempt to reveal the complementary relation between the two statements. The two chapters dealing with the accounts and statements reflecting income and expense (Chapters 28 and 29) emphasize the nature and purpose of the profit and loss account. The profit and loss statement is presented as a formal report of the nominal elements appearing in the summary account of income and expense.

There is, of course, no mechanical error in such a treatment of profit and loss. The profit and loss state-

ment does present formally the elements of the profit and loss account. However, a knowledge of this fact, no matter how well it is emphasized, does not stress the relationship between the profit and loss statement and the balance sheet. Furthermore, there is an indubitable disadvantage to such a presentation. The student does not realize, when he is concerned with balance sheet valuation, that he is also concerned with the allocation of income and expense. He does not realize, for example, that the valuation of the Reserve for Bad Debts also entails the valuation of gross income for the current or a past period of time. He is insensible to the fact that, when he is concerned with determining of a Reserve for Depreciation, he is also concerned with the allocation of current or past expense.

This writer does not wish to imply that the authors have neglected nominal accounts. They have clearly indicated the offsetting entries, when, for example, they have presented their analysis of valuation for accounts receivable and for fixed assets. Nevertheless the fact that the chapter headings are balance sheet classifications leaves the impression that as long as the real accounts are properly presented the accountant has discharged his duties satisfactorily. The authors would undoubtedly agree this is far from the case. Proper balance sheet presentation, as of a particular point in time, does not always result in the proper allocation of receipts and disbursements through time as a series of incomes and expenses.

The general theory of accounts will become in fact a general theory when writers abandon the traditional outlines which overemphasize the elements of the balance sheet, and adopt a procedure which presents facts in their relation to one another. Accounting for profit and loss is but another aspect of accounting for the balance sheet. The two statements are complementary.

One other point should be emphasized. The general theory of accounting is not altogether a series of disconnected problems. The valuation of fixed assets, for example, is not unrelated to the valuation of some charges and prepaid expenses. The valuation of notes payable is not unrelated to the accounting for prepaid interest. The balance sheet valuations in both instances are allied to the allocation of income and expense. Accounting is not entirely the act of dealing with a series of unrelated problems pertaining to enterprise. The rules which govern the recording of business transactions and their treatment in accounts, as well as the treatment of accounts in financial statements, may be integrated. A general theory of accounts should deal, among other things, with this integration for there is a general theory only when there is such an alliance.

EDWARD G. NELSON

Stanford University

Accounting Developments During the Present Century.
Walter A. Staub. (Harvard University Press, 1942.
Pp. 99. \$1.25)

This is a compact and inspiring picture of present-day auditing by an author who has special qualifications for the task. His forty years in public accounting—nearly all of them as a member of the firm—and his extended service in professional organizations have put

him in personal touch with all the important developments of the period. Within the limits of his time and space the author of these Dickinson Lectures in Accounting could not be expected to present a history of American auditing, even though he has been very much in and of it. Nor would such an approach have been appropriate to the occasion.

Those who heard the lectures must have felt that the material was well selected and organized with notable skill. They must have perceived, as the reader does, that here is an excellent description of the characteristics and present-day purposes of auditing. We are taken behind the scenes and shown that, despite popular misconceptions and regardless of inherent limitations too often overlooked, public accounting does make a definite contribution to social welfare. By skillfully interweaving comments about earlier conditions while giving major attention to present-day matters, the author very effectively brings the reader to the conviction that the events of recent years indicate a distinct growth in the professional stature of public accountants.

From the author's observations on the evolution of auditors' certificates it is clear that the changes in the phrasing of these reports has signified important developments in the professional accountant's responsibilities. No doubt this is not unrelated to the concurrent evolution of controllership and internal control. As fast as these functions within corporations are organized to conduct a continuous and extensive verification of transactions and records as a safeguard against speculations, the independent public accountant gains a counterbalancing freedom to devote more of his time to study whether the corporation consistently applies accepted accounting principles and to consider the manner in which disclosure is made in the financial statements. The professional auditor in this way can direct most of his energies toward guarding the corporation and the public against erroneous accounting policies.

The public interest in the dependability of published financial statements is now widely recognized, and the necessity for auditor independence is increasingly stressed. But it has not always been thus. The author points out that at the time he began his professional career, financial statements were seldom under examination. The public accountant was commonly retained to conduct a cash audit in order to examine into the fidelity of the cashier or treasurer. In the late nineties an era of corporation consolidation brought with it the need for a more general accounting examination. As a result, financial statements assumed new importance, and, because of the volume of transaction details which made selective tests necessary, the "balance-sheet audit" became standard procedure.

Soon after the turn of the century this procedure proved to have additional usefulness. Banks were then developing credit departments wherein the procedure of passing upon applications for loans included a study of the borrower's balance sheet. The usefulness of an independent report on the statement was obvious, and the balance sheet continued to be the focus of the auditor's examination.

By 1917, Federal income taxation had developed to the point where business felt impelled to give closer

attention to the determination of net income. Depreciation expense, for example, now became a reality for many to whom it had before been only a vague theory. In addition, the War made people security-conscious, and their interest, transferred to general securities after peace, gave still further impetus to the reporting of income. The time was passing when the balance sheet could be the principal object of the auditor's examination and the main source of public information about a corporation. These developments not only showed that a public-welfare aspect of public accounting already existed—which led to the inclusion of certain accounting provisions in the securities and exchange legislation of 1933-34—but they also gradually led to changes in audit procedure. A few of the items of this sort that the author mentions may be indicated here.

Early published financial statements were highly condensed; today statements are much improved as to both form and substance. Until recent years the auditor seldom had any physical contact with inventories and seldom sought confirmations from people outside the enterprise under audit. Furthermore, relatively little attention was given to the verification of fixed assets at a time when cash was the center of interest. As fixed assets came to bulk ever larger in the balance sheet, and as the whole statement came under examination, this attitude changed.

Another item of considerable significance was internal check. Ever since selective tests came into prominence, auditors have considered that the absence of good internal check was adequate cause to enlarge the scope of their examinations. This question has grown in importance in recent years, and now it is usual for the public accountant to make an extensive and critical examination of all phases of the client's system of control.

This epitome of the developments of forty years would be incomplete without mention of another feature. The author's experience makes him entirely competent to observe that the accomplishments of accounting in enterprises under direct regulation of government have seldom measured up to what has been done through accounting elsewhere.

Banks and insurance companies, for example, have lagged behind trade and industry in the full utilization of accounting and the skills of accountants. But in these fields the pattern was established before public accounting was recognized in this country, and the type of regulation and scrutiny then implanted has been continued. Because of this, financial institutions, such as banks and insurance companies, have seldom had the benefit of regular and critical contact with professional accountants. It may be noted, however, that this has not been the case in Britain and Canada.

The author supports this thesis also by citing instances tending to show that prescribed uniform accounts for railroad companies have not been a satisfactory substitute for the independent audits which at one time were customary here as well as in Great Britain. There is no necessary clash between prescribed systems of accounts and independent audits. This is indicated by the fact that public utility companies, although regulated by state and Federal governments, are for the most part audited by certified public accountants.

It is the reviewer's opinion that no one who is in the least aware of the pressure of work under which public accountants have struggled for a long time could believe that convictions such as these could be prompted by a self-seeking complex on the part of accountants. The fact of the matter is that clear concepts of public welfare are very strong in the minds of all responsible public accountants and have been for a long time. In speaking of the benefits of accounting they are no more self-seeking than the physician who urges the establishment of a department of public health.

Since the early days of certified public accountant laws, detractors of accounting as a profession have sought to establish the idea that the sponsors of such legislation were monopolists at heart, seeking only their own advancement. We are now far enough from this early legislation to realize that the pioneers of statutory recognition had the public interest at heart at a time when there was little public interest supporting their views.

Only two criticisms come to mind concerning this volume and both of these are minor. Many students will regret that the author has given but sketchy glimpses of the earliest days of the four decades. Since he had to choose his material with care for the purpose at hand, he probably could not do otherwise than stress the present at the expense of the past.

Those who wish to look further into past details are referred to a prize paper by the same author entitled "Mode of Conducting an Audit," published in the proceedings of the International Congress of Accountants and reprinted elsewhere in this number of THE ACCOUNTING REVIEW. It impresses one not only as fully worthy of the prize it won, but also as being a distinct contribution to American auditing literature at the early date of 1904.

The other criticism is possibly sponsored by the reviewer's own prejudices. It has to do with frequent reference to the cost or market rule. There is good reason to believe that the rule is probably on its way out. It may perhaps serve as one element to use in deciding the adequacy of an inventory reserve, but hardly more than that. Even in the beginning it never was anything more than a banker's rule for valuing collateral, extended by analogy to merchandise inventory, and accepted by accountants who prepared balance sheets for credit purposes. It is doubtful whether the rule ever was a true part of accounting as such, or ever had any real validity in connection with the vital matter of a careful showing of income determination.

These are indeed small matters in comparison with the real contribution the author has made. But if a critic can find fault with nothing, he may as well confess to the wish that he could have written the book himself.

A. C. LITTLETON

University of Illinois

Intermediate Accounting. E. I. Fjeld and Lawrence W. Sherritt. (New York: The Ronald Press Company, 1942. Pp. xi, 533. \$4.00.)

Professors Fjeld and Sherritt have written a book entitled *Intermediate Accounting* which seems well adapted to the intermediate field; that is, it is so pre-

pared as to tie on to the foundation such as the average student might be expected to acquire by a year's study of one of the several elementary texts now available.

The publishers have departed from what is more or less generally regarded as the standard format of text books on accounting. The volume is approximately 7"×10", whereas the standard size is about 6"×8½". The book contains 533 pages, is printed on good paper, and is attractively bound. There are 15 chapters, some of which are comparatively exhaustive in their treatment of the subject in hand. The book has a satisfactory index.

In the field of elementary accounting only basic principles can be considered with profit; but in the intermediate field there is an opportunity to pay attention to some of the more advanced aspects of the subject, including recent developments, different interpretations by the authorities, and alternative methods of accomplishing what may be essentially the same result. The authors are fully aware of this need for a broadened approach to the study of applied principles, as is shown by their treatment of such subjects as capital stock, investments, fixed assets, and reserves and funds; in general, however, they are strictly orthodox, and adhere to the principles of accounting as interpreted and applied by reputable practitioners.

There are innumerable things in the book which might be made the subject of comment; but for purposes of this review such comment must be limited to two or three points. At page 23 it is stated that: "Bad debts may be classified under selling, administrative, or non-operating expenses. The determining factor in classifying this item should be the responsibility for bad debts, since a minor function of an operating statement is to reflect responsibility." This statement is fairly typical of the method of approach adopted, viz., the application of principles in accordance with interpretations based on circumstances. At page 254, the authors point out several depreciation fallacies, as follows: (1) the assumption that the primary purpose of depreciation accounting is to write off the decrease in value of assets due to wear and tear; (2) the assumption that total depreciation written off against an asset measures loss of efficiency; (3) that depreciated or book value represents present or market value; (4) that a reserve for depreciation implies a reservation of funds; (5) that depreciation is a function of income. These somewhat critical statements deserve commendation in an intermediate text.

The book is the result of careful work on the part of both authors and publishers. It represents a satisfactory excursion into the field of applied theory.

EARL A. SALIER

Louisiana State University

Introduction to Accounting for Students of Economics. C. A. Ashley. (Toronto and London: The University of Toronto Press and the Oxford University Press, 1942. Pp. 136. \$1.50.)

This small book presents a clear elementary statement of the technique of double entry accounts. It is divided into six chapters but the continuity of the discussion is emphasized by the absence of chapter titles.

The first chapter gives very briefly reasons for the increasing importance of accounting. The second chapter takes up the essential accounts needed in the initial operations of a very small business. In the third chapter the presentation of technique is developed to include simple columnar books of original entry. Chapter four is devoted primarily to elements of the balance sheet and five deals with capital stock problems, dividends, reserves and consolidated accounts. The last chapter is a discussion of manufacturing and trading operating statements, cost accounting, and the analysis of published reports. It also includes examples of published reports.

Along with his presentation of technique, Professor Ashley roundly condemns the use of accounts as a means of misrepresentation. One such example cited is the use of arbitrary and irregular allowances for depreciation. Banks come in for some special censure. After citing the practice of showing Land and Buildings at \$1.00 and the manipulation of accounts to conceal fluctuations in profits, Professor Ashley writes as follows: "Many banks, of course, go further than this and actually engage in fictitious transactions month by month for the purpose of 'window dressing' their monthly statements."

"Whether financial institutions are justified in publishing false statements to conceal fluctuations may be argued, perhaps, but the extension of this practice to industrial and commercial companies can have nothing but bad results: the practice is, however, widespread" (p. 90).

In discussing cost accounting, Professor Ashley writes, "Although cost accounting has proved very useful as a method of internal control it has not proved very useful in determining either the most profitable volume of production or the sales policy."

This statement is open to some question. In comparison with the whole course of accounting evolution, cost accounting is still in its infancy but certainly in many cases it has proved very influential in shaping both production and sales policies. From the context of his statement, it appears that Professor Ashley is referring to the specific points that cost accounting does not determine marginal costs and that it cannot be used as the sole guide in fixing sale prices of specific goods and services.

The second of these points calls for little, if any, comment; it is fully covered in Professor Ashley's discussion. But the implication that accounting has fallen short in its failure to measure marginal costs, a goal set for it by economists, does call for further consideration.

Professor Ashley writes, "Many business men have refused to accept business at a lower price, which would result in an increase in profits for the short run, on the grounds that a general lowering of price might occur, which would result in a decrease in profits in the long run. The use of cost accounting figures giving total costs in place of the use of marginal cost figures has undoubtedly accentuated this" (pp. 113-14).

The clear implication here is that business managers have not always acted in accordance with the tenets of economic theory and that in their failure to do so they have been aided and abetted by accounting. But the

managerial policies of modern large scale business enterprise do not run in terms of adjustment of operations to a single current market. With respect to both time and space they are broader than the conception of economic action which is assumed in traditional economic theory. They do not run in terms of maximum immediate profits or even maximum profits for the current fiscal period. The corporate management which consistently jeopardized the interests of future stockholders for the sake of current profits would not long survive.

Neither the economist nor the accountant has effectively adjusted his thinking to a situation which is dominated by large scale business enterprise. However, the accountant's conception of standard cost gives more promise of such an adjustment than does the economist's conception of marginal cost.

Professor Ashley's book raises again the question of the best method of presenting accounts to a group of laymen. In the opinion of this reviewer, any discussion which is short enough to appeal to laymen will leave the reader with a better appreciation and more fundamental understanding of accounts if it is limited to a general discussion of such topics as accounting reports, the functions of accounts, their evolution and the duties and social responsibilities of the accounting profession, without taking up the technical details of keeping the accounting record.

DR SCOTT

University of Missouri

Introduction to Accounting, Louis O. Foster. (Chicago: Richard D. Irwin, Inc., 1941. Pp. 730. \$4.00.)

Whenever a new elementary accounting text is published, teachers of accounting expect to find in it some better and more interesting way of presenting the subject to beginners. Mr. Foster's new text, published in 1941, deserves worthy consideration because it does provide a logical and natural introduction for beginning students on the college level.

The author refers to his unusual method as the *asset approach*. Instead of using the so-called "basic equation" approach, which requires the explanation of a mathematical equation, the author emphasizes the viewpoint of assets and the functions performed by them. His contention is that students can learn accounting procedures more easily, and with greater understanding, by being introduced first to the importance of assets in a business administered as a production unit.

In the first two chapters, which serve as a general introduction to accounting terms and business practices, the student acquires a background in the administration problems of a business. Incomes are explained as sources of assets and expenses or costs are explained as immediate or future decreases of assets. Then other sources of assets are introduced, such as investments of owners and loans from creditors, and other uses of assets such as distributions to owners and payments to creditors. These transactions, resulting in increases and decreases of assets, naturally call for the double entry method of keeping accounts.

Everything in the text through Chapter VII is pointed to this basic concept of assets and their functions. Financial statements of companies in different

types of businesses are compared to show the differences that exist in their financial structures. Variances in asset ratios are illustrated.

The actual bookkeeping technique of recording transactions is deferred until Chapter X. Apparently the author believes that a broad foundation is needed first to familiarize the student with business transactions and practices. He is of the opinion that the student will learn accounting best by acquiring first a knowledge of the purposes of accounting. After he becomes familiar with the classes of assets and liabilities, and with the meaning of capital stock, surplus, dividends, incomes and expenses, as well as accrued and deferred items, the student will find the bookkeeping technique something easier to understand and he will readily see that it is a logical method, essential and valuable to the management of the business.

Certainly most teachers of accounting have experienced difficulty in teaching the bookkeeping techniques early in a beginner's course. As a result, a large number of text writers have used the "balance sheet approach," because it gives more meaning to the techniques that follow. But no other author, so far as this reviewer knows, has deferred double entry procedures so far into the text as has Mr. Foster. Not until Chapter X does the student learn double entry procedure.

Moreover, the author in this text developed a specialized balance sheet approach in emphasizing the importance of assets. While the managerial viewpoint is stressed from the start, as in many other texts, special emphasis is placed here on asset movements caused by business transactions.

Chapters X-XX deal with the accounting books and records, entries of transactions in ledgers, and books of original entry; periodic recording of decreases in assets and accruals of incomes and expenses; the working sheets, trial balance, closing of accounts, and the preparation of financial statements. The voucher system and simple manufacturing accounting are also presented together with two extended practice sets.

Mr. Foster also uses the corporation form of business in this elementary introduction to bookkeeping, rather than the single proprietorship on the grounds that the corporate form of business is "by far the most common form of commercial organization for business concerns of any size." Some teachers of accounting, however, still prefer to introduce the student first to single proprietorship accounting because he is less familiar with corporations and their managements.

In Chapters XX-XXIV, corporation accounting is elaborated at greater length, with a fairly adequate discussion of classes of par-value stock, treasury stock, no-par-value stock, surplus, dividends and reserves.

The next four Chapters, XXV-XXVIII, introduce the student to problems in accounting for income determination, cash controls, the valuation and control of receivables, the valuation and control of inventories, fixed assets and the related problems of depreciation, accounting for all classes of liabilities, treatment of investments, and the preparation and analysis of financial statements.

Throughout the second part of the text, the author

supplements the elementary discussion with helpful observations, on numerous subjects, such as the relationship existing between engineering and accounting, as well as that between economics and accounting. Especially in his explanation of depreciation of fixed assets, Mr. Foster effectively explains the meaning of depreciation in accounting as "the cost of used-up services," rather than a phenomenon of physical deterioration. If an accounting student can get hold of that concept early in his training, he will be aided considerably later in the proper handling of problems of appraisal both in the write-up and write-down of fixed assets.

However, the author's opportunistic conclusion on the disposition of goodwill ("as a matter of fact, the problem does not seem of much importance") may mislead a beginning student to assume that an asset may or may not be written off the books by the accountant.

At several points throughout the text, the author stresses the need of making estimates of operations, which is entirely ignored in most accounting texts. The future of a business *can* be controlled more effectively if trends are discovered by an analysis of comparative financial statements prepared by the accountant.

The problems of determining incomes and expenses are especially well discussed in Chapter XXIX. It is rather unusual for a first year text to include such a full discussion of advanced accounting. It may be justified—no doubt—if students start their study of accounting as juniors or seniors. It should not be overlooked that the early introduction of too many controversial matters may well result in the complete confusion of the beginning student. It is probably wiser to eliminate many of the alternative procedures, during the first year, in order to simplify the subject for the beginner.

Abundant problem material is provided, at the end of each chapter. It would have been much better to include, as model illustrations, typical ledger accounts in addition to T form accounts. Beginning students of accounting require an essential minimum amount of training in the keeping of accounts. If the text is lacking in anything, it is obviously lacking in ruled accounts.

Illustrations and charts are well presented, but not numbered or listed. This, of course, is not a serious omission, but it may cause some difficulty—for students or teachers who wish to locate certain standard forms.

An author who sets out to develop a text on a special type of approach, may neglect to stress adequately other important phases of the subject. Mr. Foster is not guilty of this. Although he is primarily interested in teaching beginners to see accounting from the asset side of the balance sheet, he also recognizes the importance of the legal concept of equities, but he subordinates this approach to the asset introduction. There are available enough beginning books which approach the subject from the legal viewpoint, which stresses ultimately the accountant's service to the public. The author of "Introduction to Accounting" has maintained a reasonable balance between the managerial and professional viewpoints, and has provided a broad, sound, and logical text for beginners.

EDWIN L. THEISS

University of Illinois

ASSOCIATION REPORTS FOR 1942

A Message from the Retiring President

HAVING been deprived of the privilege of addressing the members of the Association at an annual convention, I take this way of reviewing the past year.

The annals of the Association for 1942 are both short and simple. The events which have profoundly affected the lives of so many of its members conspired to prevent any spectacular developments. Publications other than the *REVIEW* were non-existent, although certain plans were made which may result in publications at a later date. A complete index of the *REVIEW*, which has been in process during the year, will make the material which has appeared in the *REVIEW* more available for research and instructional purposes. The *REVIEW* itself during the year maintained its traditional high standards. Much more than the ordinary amount of credit should go to the Editor for this achievement, since he has been heavily engaged in activities related to the war effort.

Membership and the financial status of the Association have been maintained on a satisfactory basis in spite of manifold difficulties. Rather late in the year some 20 members of the Association agreed to undertake to promote membership in their respective states. To their efforts is due the fact that the membership shows a slight increase for the year. The financial condition of the Association is, if anything, too sound. Some of the cash on hand would better have been spent in advancing the objects for which the Association exists. It is my hope that my successors will succeed in getting some of these idle funds into circulation.

The lot of a president would indeed be

hard if it were not for the support of the other officers and the membership generally. During the entire year I never found anyone reluctant to do what he could to further the interests of the Association. At the risk of slighting many who made important contributions, I want to acknowledge the help of some whose work I was in a particularly good position to observe. The past presidents were ever ready with the best in counsel and assistance. The vice-presidents were heavy contributors of ideas for the program of the annual meeting. To them and to the prospective session chairmen and speakers thanks are due, a poor substitute indeed for the satisfaction of seeing their efforts bear fruit. Another victim of frustration was Roger Knittel, who cheerfully undertook to look after local arrangements in Cleveland and spent many hours on wholly unremunerative plans. There is no way, of course, even to measure the contribution of the Secretary-Treasurer, to say nothing of rewarding his unremitting labor for the Association and his watchfulness for its interests. It is ironical that the only recompense for such exceptionally faithful service seems always to be a resentencing to the same weary round.

As you are told elsewhere in this issue, the committee of past presidents, appointed under the extraordinary powers granted by the postcard ballot, met and performed their function. I think you will agree that they made an excellent choice. For the new president, for the other officers, and especially for the new editorial board of *THE ACCOUNTING REVIEW*, I bespeak your wholehearted support and cooperation.

H. F. TOGGERT

Report of Special Election Committee

Under the general grant of authority given by the special mail vote of the membership, authorized by action of the Executive Committee, the following slate of officers for the year of 1943 has been elected:

President:

A. C. Littleton, University of Illinois

Vice-Presidents:

William E. Cox, University of Washington
Alva L. Prickett, Indiana University
Walter A. Staub, Lybrand, Ross Bros., & Montgomery

Secretary-Treasurer:

Robert L. Dixon, University of Michigan

Editorial Board:

Henry T. Chamberlain, Loyola University
A. C. Littleton, University of Illinois
C. Rufus Rorem, American Hospital Association

Director of Research:

Frank P. Smith, Office of Price Administration

Attention is called to the election of an "Editorial Board" to exercise the function of editor. The specific motion covering this point reads as follows:

"An Editorial Board of three members, Henry T. Chamberlain, C. Rufus Rorem, and A. C. Littleton, is hereby constituted and elected to exercise the function of editor, with the assistance of three or more associate editors to be appointed by the Executive Committee upon the recommendation of the Editorial Board."

(Dean Chamberlain was excused from voting on this motion.)

Special Election Committee

HENRY T. CHAMBERLAIN
F. H. ELWELL
HOWARD C. GREER
DAVID HIMMELBLAU
H. T. SCOVILL
SIDNEY G. WINTER
W. A. PATON, *Chairman*

Report of the Secretary-Treasurer

The year 1942 was successful from a financial standpoint as indicated in the accompanying auditors' report. Operations of the General Fund resulted in a net gain of \$2,205.39 as compared with \$1,764.73 for 1941. The Life Membership Fund produced a net gain amounting to \$83.03. This compares with \$382.98 for 1941.

The net increase in membership for the year was not as large as in previous years, amounting to 76 as compared with 120 in 1941 and 126 in 1940. Details of changes in membership for 1942 are as follows:

Number of members at December 31, 1941.....	1,184		
New Members in 1942.....	143		
Decreases:			
Resignations in 1942.....	33		
Deaths in 1942.....	4		
Dropped in 1942.....	30	67	76
Membership at December 31, 1942.....			1,260

Auditors' Report

March 26, 1943

American Accounting Association:

We have examined the balance sheets of the General Fund and the Life Membership Fund of the American Accounting Association as of December 31, 1942, and the statements of income and expense for the year then ended, have reviewed the accounting procedures of the Association and, without making a detailed audit of the transactions, have examined or tested accounting records of the Association and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

In our opinion, the accompanying balance sheets and related statements of income and expense present fairly the position of the General Fund and the Life Membership Fund of the American Accounting Association at December 31, 1942, and the results of operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST
Certified Public Accountants

BALANCE SHEET—GENERAL FUND
American Accounting Association
December 31, 1942

<i>Assets</i>		
Cash.....		\$4,350.89
Dues receivable.....	\$ 735.00	
Less reserve.....	625.00	110.00
Subscriptions receivable.....	\$ 88.90	
Less reserve.....	32.00	56.90
Accounts receivable for advertising.....		168.75
Office equipment.....		22.00
		<u>\$4,708.54</u>

<i>Liabilities</i>		
Due to Life Membership Fund.....	\$ 31.06	
Deferred income—dues.....		215.00
Deferred income—subscriptions.....		722.40
Surplus:		
Balance at December 31, 1941.....	\$1,534.69	
Net income for year ended December 31, 1942.....	2,205.39	3,740.08
		<u>\$4,708.54</u>

STATEMENT OF INCOME AND EXPENSE—GENERAL FUND
American Accounting Association
Year ended December 31, 1942

<i>Income:</i>		
Dues.....	\$4,760.00	
Subscriptions.....	2,234.50	
Advertising.....	1,408.50	
Miscellaneous.....	57.70	\$8,460.70
<i>Expenses:</i>		
ACCOUNTING REVIEW.....	\$3,328.85	
Reprints.....	224.65	
Projects and Executive Committee expenses.....	290.51	
Secretary's compensation.....	500.00	
Editor's compensation.....	500.00	
Printing, postage, and stationery.....	520.83	
Convention expenses.....	12.69	
Clerical expenses.....	212.72	
Provision for uncollectible dues.....	380.00	
Miscellaneous expenses.....	285.06	6,255.31
Net Income.....		<u>\$2,205.39</u>

BALANCE SHEET—LIFE MEMBERSHIP FUND
American Accounting Association
December 31, 1942

<i>Assets</i>		
Cash.....		\$5,493.89
Accounts receivable—monographs.....	\$ 36.90	
Less reserve.....	10.90	26.00
Account receivable from American Institute of Accountants.....		18.72
Due from General Fund.....		31.06
United States Savings bonds, Series F—at cost.....		2,516.00
		<u>\$8,085.67</u>

Liabilities

Royalties payable.....	\$	16.02
Net worth:		
Contributions of life members.....	\$2,330.00	
Transfers from General Fund.....	5,000.00	
Surplus:		
Balance at December 31, 1941.....	\$656.62	
Net income for year ended December 31, 1942.....	83.03	739.65
		<u>\$8,085.67</u>

STATEMENT OF INCOME AND EXPENSE—LIFE MEMBERSHIP FUND
American Accounting Association
Year ended December 31, 1942

<i>Income:</i>		
Sale of monographs.....	\$506.12	
Interest on bank deposits.....	65.88	\$572.00
<i>Expense:</i>		
Cost of printing Monograph No. 3.....	\$361.75	
Royalties.....	10.86	
Cost of typing index to ACCOUNTING REVIEW.....	97.88	
Postage.....	5.10	
		<u>\$475.59</u>
Less American Institute of Accountants share of profit on sale of Monograph No. 3.....	13.38	488.97
Net Income.....		<u>\$ 83.03</u>

A Message from the Incoming President

I am not unappreciative of the honor of leading the Association for this year. But this is quite secondary to the responsibilities which fall upon us because of present conditions.

Throughout the membership we need to strive for a strong spirit of coöperation in the face of the distracting influence of unusual personal activities and the national emergency.

We need to make extra efforts to preserve a sense of organized solidarity in the face of an enforced dispersion of efforts.

It is just as necessary as ever, perhaps more so now, that we encourage contacts among teachers, public accountants, and business men in the long-run interest of accounting education and accounting progress.

In addition, we must maintain the established high standards of quality in *THE ACCOUNTING REVIEW* and the monograph series.

The achievement of these objectives rests in the last analysis with the membership. Each member should consider himself a planning force to conceive ideas and offer suggestions; an expansion force to preserve and enlarge the membership in spite of unfavorable conditions; a constructive force to think about the problems of accounting and write about them for publication.

There is a very real opportunity—and an obligation—for men who have not been as active in the Association as they might have been to step forward into the breach left by those who have been drawn off into other activities.

THE ACCOUNTING REVIEW. The Association's principal activity is publishing *THE ACCOUNTING REVIEW*. It is still of major importance. Change in the method of administering the periodical is regrettable, but, in the considered judgment of a large committee of past presidents, advisable.

From the time of the organization of the Association in 1916 up to 1926, the *REVIEW*'s antecedents were the published proceedings of the annual meetings. Since its beginning as a quarterly magazine in March, 1926, the *REVIEW* has grown in the size of a typical number and in the variety of the contributions. This has been accomplished under the editorship of W. A. Paton during the early years and of E. L. Kohler for nearly fifteen years. In this period accounting literature has developed very rapidly, and there has been a good deal of healthy debate and discussion. Under Kohler's leadership, particularly, the *REVIEW* has taken a prominent part in this development. Debate and discussion should not die out. They constitute a most helpful approach to educational improvement and accounting progress.

Vigorous exchange of ideas helps to break down restrictive traditionalism and to assay new ideas.

The burden of conducting the *REVIEW* has grown so greatly that it is an unfair assignment for any one individual. A different plan of operation has been initiated, but it is still fluid. How it will develop with experience remains to be seen. In general outline, however, it is an operational plan that has been successfully used by other organizations.

Briefly, the plan involves two aspects: (1) election of a three-man editorial board charged with forming publication policies and developing a staff organization, and (2) the selection of a number of members to serve on an editorial staff with such subdivisions of duties as discussion and experience may suggest.

There is only one goal: to continue *THE ACCOUNTING REVIEW* on its present high plane. Many people will be called upon to share the responsibilities. To make their contributions, members of the board and the staff have only to apply the same kind of interest and exert the same kind of energy that Paton and Kohler have done. Members in general can make their contribution by searching out the areas and items in accounting and education that need discussion, and by writing their views and experiences.

MONOGRAPHS AND RESEARCH. I am going to take advantage of the unique opportunity afforded me—the opportunity to have time to think out what I might say to the members in response to my selection as the new president—to give you some personal ideas about monographs and research. These are phases of Association activity with which I have been connected and wherein my present ideas are most sharply defined.

I think of the publication of monographs as a continuing activity, just as the publication of the *REVIEW* is. This ac-

tivity is still in its initial stages of development. While it is small and evolving, it needs the coordinating touch of strong leadership charged with establishing the pattern and the standards of the monographs within such financial limits as the executive committee may set from time to time. For the formative period this responsibility could be placed in the hands of a small special committee to consider matters of policy and to advise with the chairman on the merits of projects and manuscripts. Later it might be wise to join monograph publication and the REVIEW to the extent of placing monographs under a specifically designated associate editor who would have ample individual authority to ask advice of anyone upon manuscripts under consideration and to see his selections through the press.

As to research, I am of the opinion that these activities could well be assigned to informal committees chosen from time to time to work upon specific research projects recommended for investigation from the executive committee. I am not convinced that there is need in the association for a Director of Research, or several of them. And I do not follow the logic of linking research with monographs. The writing of monographs involves research, to be sure, but it is individual research. The research of an association is better scaled on a smaller plan, leading in any one case to relatively brief conclusions drawn from committee study of data, opinions, alternatives, or the like.

In my opinion, the two activities—research and publication of monographs—will function better if separated.

A **DISPERSED CONVENTION**. In a sense the keynote of the present plan of operating THE ACCOUNTING REVIEW is "dis-

persion and coöperation." These terms are not as contradictory as they seem. Because dispersion has been made a fact, coöperation becomes a necessity. It is the same with another important association activity—the convention.

If we cannot have a convention in the usual sense, we can either omit the meeting altogether or try to find a substitute. I should like to see a try made for a substitute. We could capitalize upon "dispersion." If we can't meet together, let's meet separately. Why not organize a number of local meetings in a number of centers convenient to a number of teachers and practitioners? A one-day meeting of 50 to 100 people would not crowd the hotels unduly or burden transportation facilities.

We need to preserve the personal contacts between teachers and practitioners as well as circumstances permit. We could build up local programs of papers on suitable topics. These meetings could be held soon—that is, late in May or early in June. Transportation within a radius of three hundred miles would be more convenient than in winter; professional accountants would be freer to meet with us then; in many places the teachers would be free between terms.

In wartime, life for an association, as for an individual, will not be too difficult if we adapt ourselves to changed conditions. The alternative is to give up completely. For some people that might be an alternative, but not for Americans. I think that accounting teachers and accounting practitioners are too American in temperament and too thoroughly convinced of the continued usefulness of accounting organizations to take it lying down.

A. C. LITTLETON

ASSOCIATION NOTES

ROBERT L. DIXON

NEW MEMBERS

The following have become regular members of the Association since January 1, 1943:

NAME	PROFESSIONAL CONNECTION	NOMINATED BY
H. S. Alzinger	Army Ordnance	J. Henwood
D. P. Beaudry	Birmingham-Southern College	S. P. Garner
W. N. Bergstrom	Marquette University	L. A. Schmidt
E. J. Bigelow	Ford Motor Co.	R. L. Dixon
R. R. Camejo	Cia. Nacional de Muebles	R. L. Dixon
M. L. Channon		R. J. Cooney
V. S. Curry	University of Colorado	G. G. Fullerton
Ernest Dale	Yale University	R. C. Jones
C. R. Gibbons	Pennsylvania Edison Co.	G. O. Petty
H. P. Hartenstein	U. S. General Accounting Office	R. L. Dixon
S. N. Heltsley	Carnegie-Illinois Steel Corp.	H. L. Newcomer
C. W. Hetrick	Tennessee Valley Authority	W. V. Slatery
O. C. Johnson	Grand Transportation and Surety Co.	R. L. Dixon
P. A. Kohler	Louisiana State University	E. A. Saliers
J. A. Otte	St. Joseph's College	W. A. Paton
R. A. Phelps	Tennessee Valley Authority	W. V. Slatery
J. H. Rodbord	Federal Public Housing Authority	R. L. Dixon
R. S. Rogers	DeFeo Fruit Company	R. L. Dixon
H. S. Saunders	Dixie Drive it Yourself System	S. P. Garner
G. A. R. Schuster	Price Waterhouse & Co.	J. J. Lang
E. R. Skinner, Jr.	Price Waterhouse & Co.	J. J. Lang
A. J. Smith	St. Louis University	J. J. Lang
L. A. Smith	McDonnell Aircraft Corp.	J. J. Lang
W. A. Ullrich	Private Practice	H. F. Taggart
W. E. Wiley	Office of Price Administration	E. J. Kirkham

PERSONAL NOTES

Dana F. Cole (University of Nebraska) presented an article entitled "Gift of Future Interests" in the January issue of *Taxes*.

Ernest Dale has been appointed Instructor in Economics and is teaching accounting at Yale University.

Robert I. Dickey (University of Illinois) received his Ph.D. from the University of Illinois in October 1942 and also passed the C.P.A. in Illinois. Recently with the Office of Price Administration, he is now in the U. S. Army at Fort Custer, Michigan.

H. William Kuze (Hofstra College) has been appointed Bursar of the college.

George A. MacFarland (University of Pennsylvania) has been acting as War Liaison Officer for the University.

Adolph Mats (University of Pennsylvania) has entered the cost division of the Budd Manufacturing Company.

Herman C. Miller (Ohio State University) has been promoted to the rank of Commander and is serving as Supervisory Cost Inspector of the Fourth Naval District.

John Pagani (University of Santa Clara) is now a T/5 in the Finance Department of the Army; he is located at Brigham City, Utah.

William F. Shors (Bryant College) has received a commission as Lieutenant (Senior Grade) in the Supply Corps of the United States Naval Reserve. He was formerly Associate Deas of Bryant College.

Alfred C. Will (University of Pennsylvania) has been employed by the Philadelphia legal firm of Drinker, Biddle, and Reath.

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